



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: _____



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
---	---

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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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	McElvain, Oil & Gas Properties, Inc.
Well Name	Hemmert 24-9 1
Doc ID	1050276

All Electric Logs Run

Compensated Neutron Litho Density
Micro-Log
Sonic Porosity-Delta T Compressional
Caliper Log
Cement Bond Log

Form	ACO1 - Well Completion
Operator	McElvain, Oil & Gas Properties, Inc.
Well Name	Hemmert 24-9 1
Doc ID	1050276

Tops

Name	Top	Datum
Topeka	3362	-998
Heebner	3579	-1215
Toronto	3600	-1236
Lansing	3615	-1251
Base Kansas City	3846	-1482
Marmaton	3887	-1523
Pawnee	3947	-1583
Arbuckle	4047	-1683

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/>

Thomas E. Wright, Chairman
Ward Loyd, Commissioner

Corporation Commission

Sam Brownback, Governor

February 02, 2011

Jim McKinney
McElvain, Oil & Gas Properties, Inc.
1050 17TH ST STE 2500
DENVER, CO 80265-2080

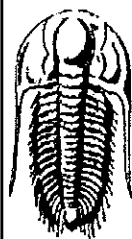
Re: ACO1
API 15-195-22693-00-00
Hemmert 24-9 1
SE/4 Sec.24-11S-23W
Trego County, Kansas

Dear Production Department:

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

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

Respectfully,
Jim McKinney



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

McEvain, Oil & Gas Prop. inc.

Hemmert #24-9

1050 17th
STE 2500
Denver, CO. 80265+2080
ATTN: Richard Bell

24-11s-23w Trego

Job Ticket: 041532

DST#: 1

Test Start: 2011.01.06 @ 17:12:05

GENERAL INFORMATION:

Formation: **LKC"A"**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 18:43:40

Time Test Ended: 23:04:50

Test Type: **Conventional Bottom Hole**

Tester: **Andy Carreira**

Unit No: **31**

Interval: **3604.00 ft (KB) To 3630.00 ft (KB) (TVD)**

Total Depth: **3630.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2364.00 ft (KB)**

2359.00 ft (CF)

KB to GRVCF: **5.00 ft**

Serial #: **8352**

Outside

Press@RunDepth: **23.96 psig @ 3605.00 ft (KB)**

Start Date: **2011.01.06**

End Date:

2011.01.06

Start Time: **17:12:05**

End Time:

23:04:50

Capacity: **8000.00 psig**

Last Calib.: **2011.01.06**

Time On Btm: **2011.01.06 @ 18:42:50**

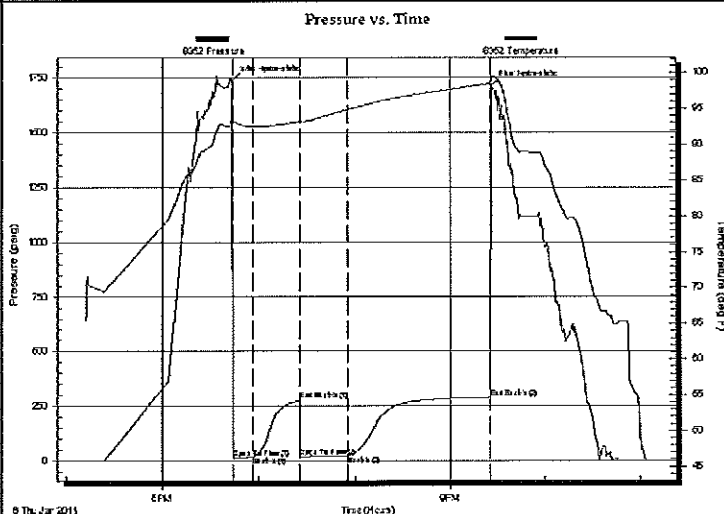
Time Off Btm: **2011.01.06 @ 21:26:20**

TEST COMMENT: **IF: Weak, Half inch**

IS: No Return

FF: Weak, Half inch

FS: No Return



PRESSURE SUMMARY

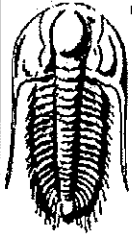
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1738.66	93.56	Initial Hydro-static
1	13.05	93.05	Open To Flow (1)
14	18.38	92.49	Shut-In(1)
43	276.91	93.21	End Shut-In(1)
43	18.90	93.07	Open To Flow (2)
73	23.96	94.88	Shut-In(2)
163	289.67	98.50	End Shut-In(2)
164	1712.64	99.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w /oil specks in tool	0.05

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

McEvain, Oil & Gas Prop. inc.

Hemmert #24-9

1050 17th
STE 2500
Denver, CO. 80265+2080
ATTN: Richard Bell

24-11s-23w Trego
Job Ticket: 041532 DST#: 1
Test Start: 2011.01.06 @ 17:12:05

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 63.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.80 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud w/oil specks in tool	0.049

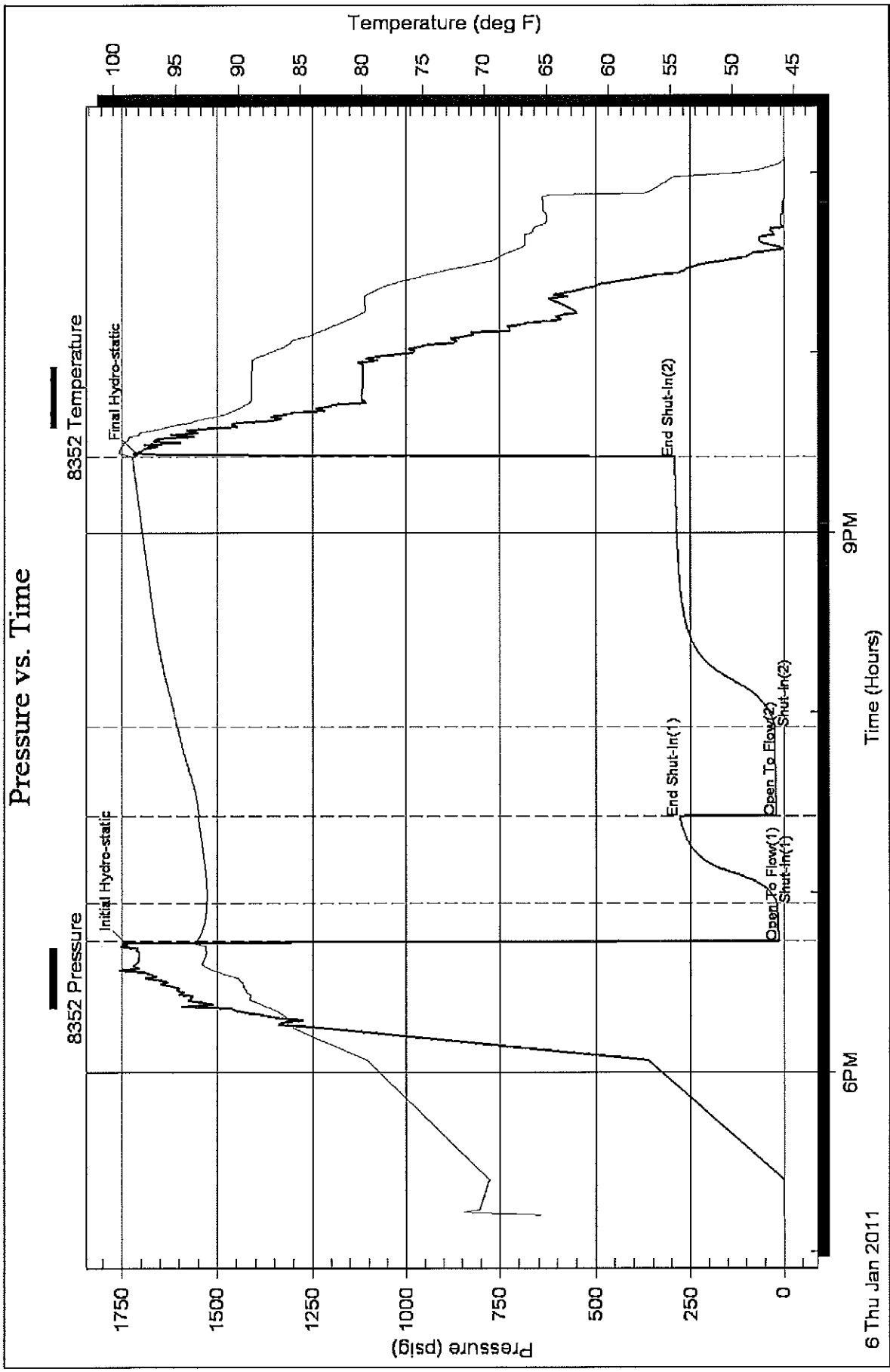
Total Length: 10.00 ft Total Volume: 0.049 bbl

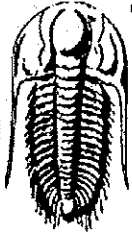
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

McElvain, Oil & Gas Prop. inc.
1050 17th
STE 2500
Denver, CO. 80265+2080
ATTN: Richard Bell

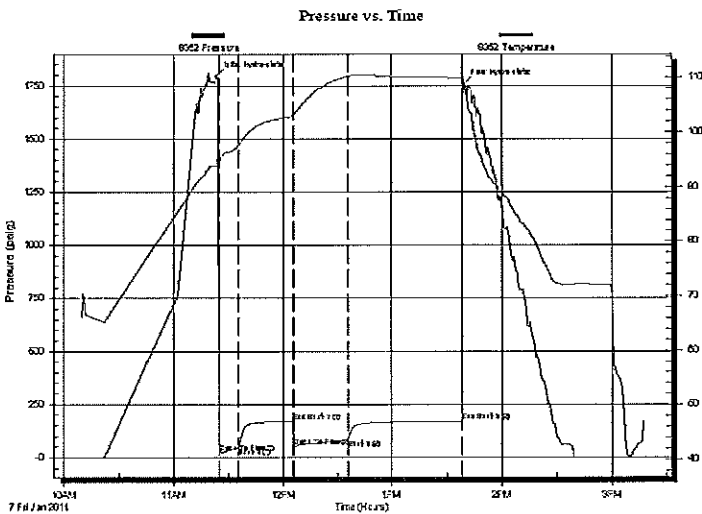
Hemmert #24-9
24-11s-23w Trego
Job Ticket: 041533 **DST#: 2**
Test Start: 2011.01.07 @ 10:10:05

GENERAL INFORMATION:

Formation: **LKC"F"**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 11:24:50
Time Test Ended: 15:17:20
Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31
Interval: **3693.00 ft (KB) To 3710.00 ft (KB) (TVD)**
Reference Elevations: 2364.00 ft (KB)
Total Depth: 3710.00 ft (KB) (TVD) 2359.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GRVCF: 5.00 ft

Serial #: 8352 **Outside**
Press@RunDepth: 83.13 psig @ 3694.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.01.07 End Date: 2011.01.07 Last Calib.: 2011.01.07
Start Time: 10:10:05 End Time: 15:17:20 Time On Btm: 2011.01.07 @ 11:23:30
Time Off Btm: 2011.01.07 @ 13:39:10

TEST COMMENT: IF: BOB, 3min.
IS: No Return
FF: BOB, 8min.
FS: No Return



PRESSURE SUMMARY

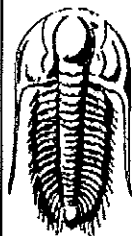
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1793.51	94.15	Initial Hydro-static
2	22.20	94.54	Open To Flow (1)
12	47.22	97.64	Shut-In(1)
42	169.76	102.91	End Shut-In(1)
43	50.57	102.89	Open To Flow (2)
73	83.13	110.25	Shut-In(2)
135	170.02	109.95	End Shut-In(2)
136	1757.82	108.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GMW g=5% m=35% w=60%	0.30
90.00	GOSMW g=5% o=5% m=10% w=80%	0.69
0.00	GIP=750ft	0.00

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

McElvain, Oil & Gas Prop. inc.

Hemmert #24-9

1050 17th
STE 2500
Denver, CO. 80265+2080
ATTN: Richard Bell

24-11s-23w Trego
Job Ticket: 041533 DST#: 2
Test Start: 2011.01.07 @ 10:10:05

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.40 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2400.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GMV g=5% m=35% w=60%	0.295
90.00	GOSMV g=5% o=5% m=10% w=80%	0.689
0.00	GIP=750ft	0.000

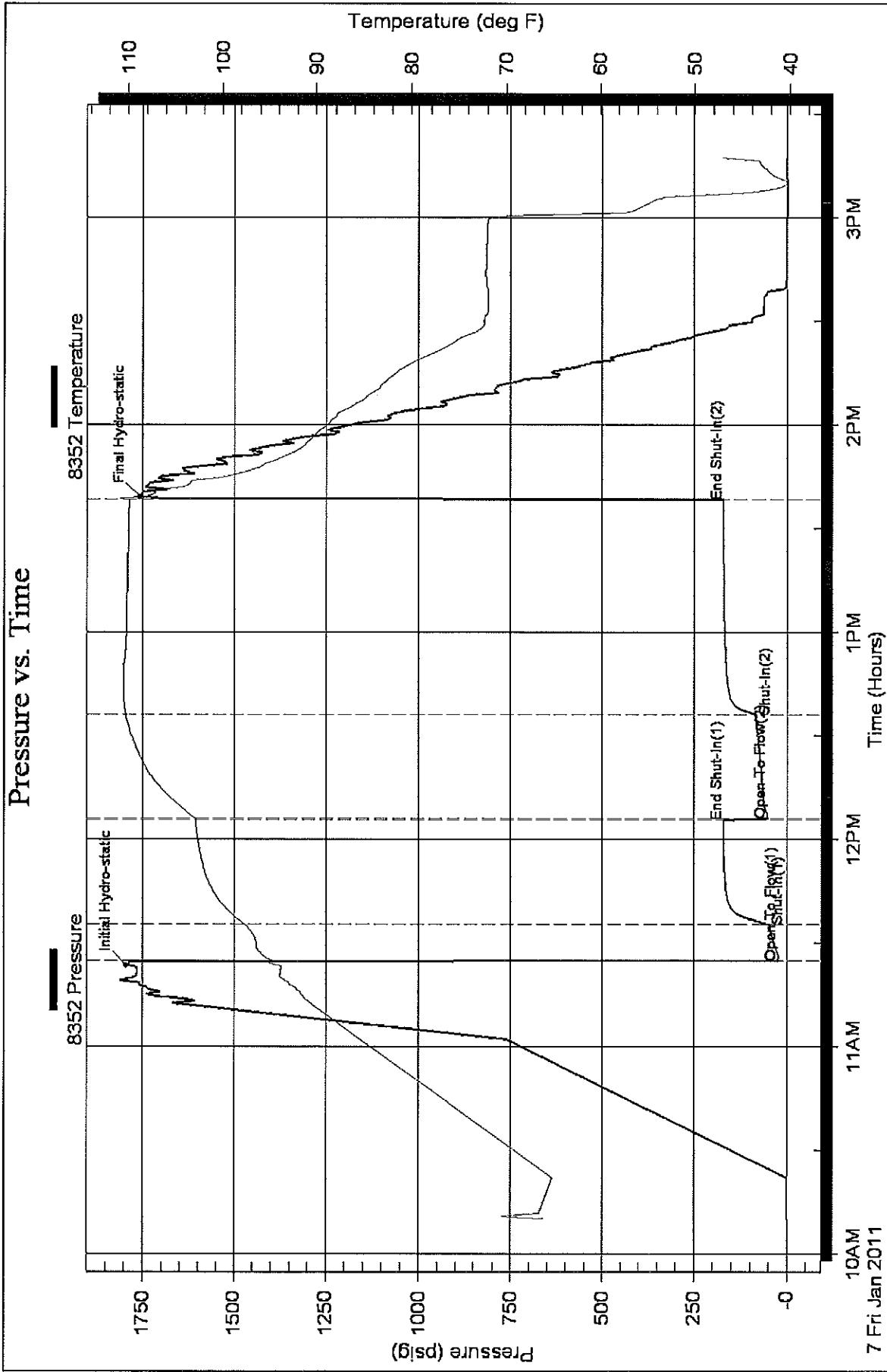
Total Length: 150.00 ft Total Volume: 0.984 bbl

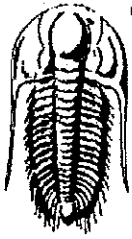
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

McElvain, Oil & Gas Prop. inc.

Hemmert #24-9

1050 17th
STE 2500
Denver, CO. 80265+2080
ATTN: Richard Bell

24-11s-23w Trego

Job Ticket: 041534

DST#: 3

Test Start: 2011.01.09 @ 11:35:05

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:21:50

Time Test Ended: 17:52:50

Test Type: Conventional Bottom Hole

Tester: Andy Carreira

Unit No: 31

Interval: **3930.00 ft (KB) To 3999.00 ft (KB) (TVD)**

Reference Elevations: 2364.00 ft (KB)

Total Depth: 3999.00 ft (KB) (TVD)

2359.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: **8352**

Outside

Press@RunDepth: 43.73 psig @ 3937.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.01.09

End Date:

2011.01.09

Last Calib.:

2011.01.09

Start Time: 11:35:05

End Time:

17:52:50

Time On Btm:

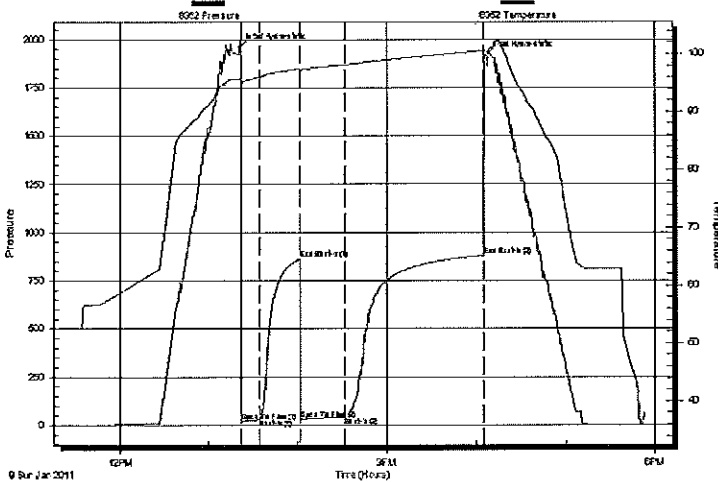
2011.01.09 @ 13:20:40

Time Off Btm:

2011.01.09 @ 16:05:39

TEST COMMENT: IF: Weak, 1+ inch
IS: No Return
FF: 2.8 & one half inches
FS: No Return

Pressure vs. Time



PRESSURE SUMMARY

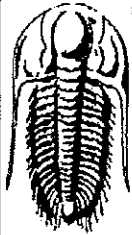
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1958.25	95.63	Initial Hydro-static
2	20.65	94.53	Open To Flow (1)
14	29.61	96.06	Shut-in(1)
42	864.02	97.44	End Shut-In(1)
42	32.09	96.99	Open To Flow (2)
72	43.73	98.10	Shut-in(2)
165	880.26	100.50	End Shut-In(2)
165	1912.48	100.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCM o=10% m=90%	0.30
2.00	Oil o=100%	0.01

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (MMcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

McElvain, Oil & Gas Prop. inc.

Hemmert #24-9

1050 17th
STE 2500
Denver, CO. 80265+2080
ATTN: Richard Bell

24-11s-23w Trego
Job Ticket: 041534 **DST#: 3**
Test Start: 2011.01.09 @ 11:35:05

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.40 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2400.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OCM o=10% m=90%	0.295
2.00	Oil O=100%	0.010

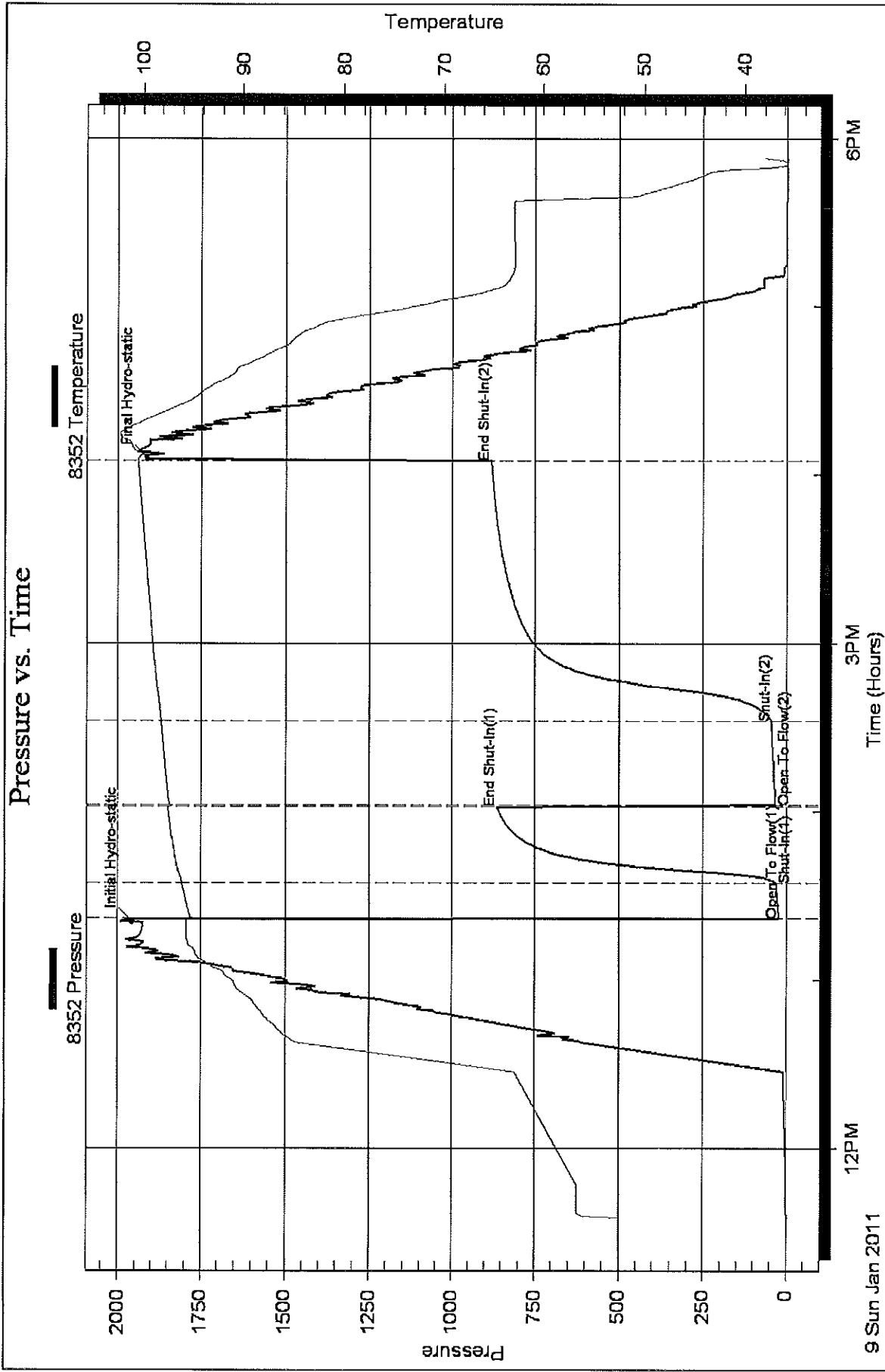
Total Length: 62.00 ft Total Volume: 0.305 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time



GEOLOGICAL REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY McEvain Oil & Gas Properties, Inc.
 LEASE Hemmett 24-9 #1
 FIELD Mang
 LOCATION 1480' E 3L & 680' F 2L
 SEC 24 TWP 11S RGE 23W
 COUNTY Trego STATE Kansas
 CONTRACTOR WW Drilling Rig #8
 SPUD 12-17-10 COMP 1-11-11
 SAMPLES SAVED FROM 3300' TO R.T.D.

ELEVATION

KB 2364'
 DF 2362'
 GL 2359'

Depths Measured From
 Log KB Drilling KB

CASING

Surface 8 5/8" @ 267'
 Production 4 1/2"

ELECTRIC LOGS
 Schlumberger

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE	E. LOG	DATUM	A	B	C	D
Anhydrite	1810	1810	+ 554	+ 559	+ 550		
Base Anhydrite	1858	1858	+ 506	+ 513	+ 507		
Topeka	✓ 3362	3362	- 998	- 994	- 997		
Heebner	✓ 3578	3579	- 1215	- 1209	- 1215		
Toronto	✓ 3600	3600	- 1236	- 1229	- 1237		
Lansing	✓ 3615	3615	- 1251	- 1243	- 1252		
Base Kansas City	3846	3846	- 1482	- 1479	- 1481		
Marmaton	3887	3887	- 1523	- 1517	- 1521		
Pawnee	3947	3947	- 1583	- 1575	- 1576		
Arbuckle	4046	4047	- 1683		- 1748		
Total Depth	4160	4160	- 1796	- 1666	- 1790		

REFERENCE WELLS

A A. Scott & Ritchie, Eva Richardson #3, SWNW SW Sec. 19-11S-22W
 B A.H. Hunt Oil & Gas, Wankar #1, SW SW NE Sec. 24-11S-23W
 C
 D

REMARKS

This well ran 1 foot higher to 8 feet lower on the Lansing top than the reference wells. The Pawnee top was 7 to 8 feet lower than the reference wells. It was production casing would be cemented to further test the well. The following should be noted; 4042'-4046', 3965'-3977', 3794'-2800' and 3660'-3666'.

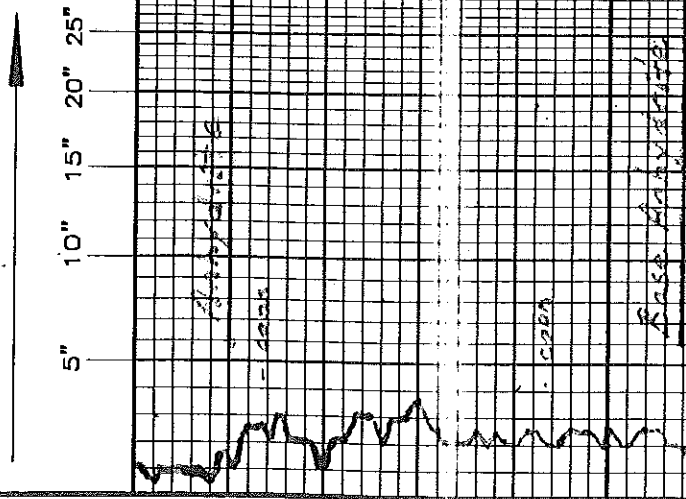
Richard G. Bell
 1-12-11

7502

LEGEND

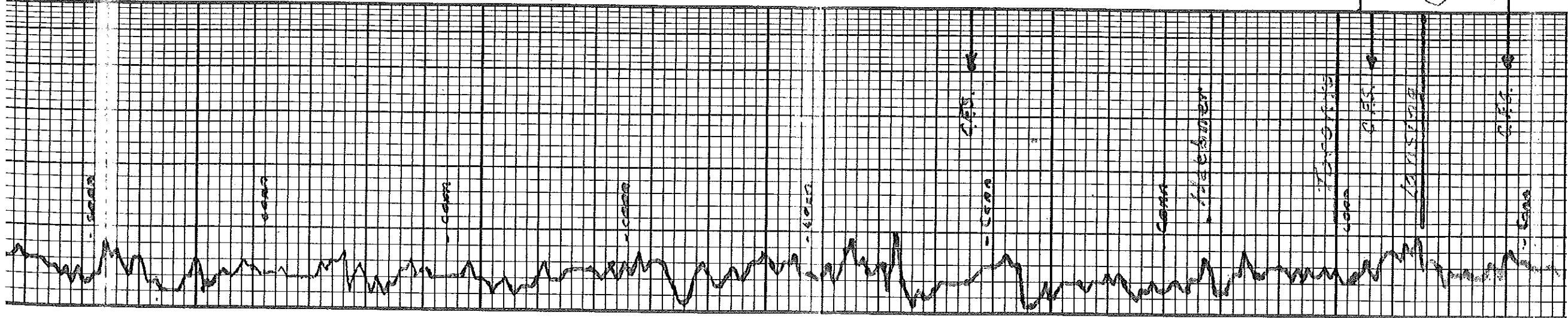
- Anhydrite
- Salt
- Sandstone
- Shale
- Carb sh
- Limestone
- Ool. Lime
- Chert
- Dolomite

DRILLING TIME IN MINUTES
 PER FOOT
 Rate of Penetration Decreases



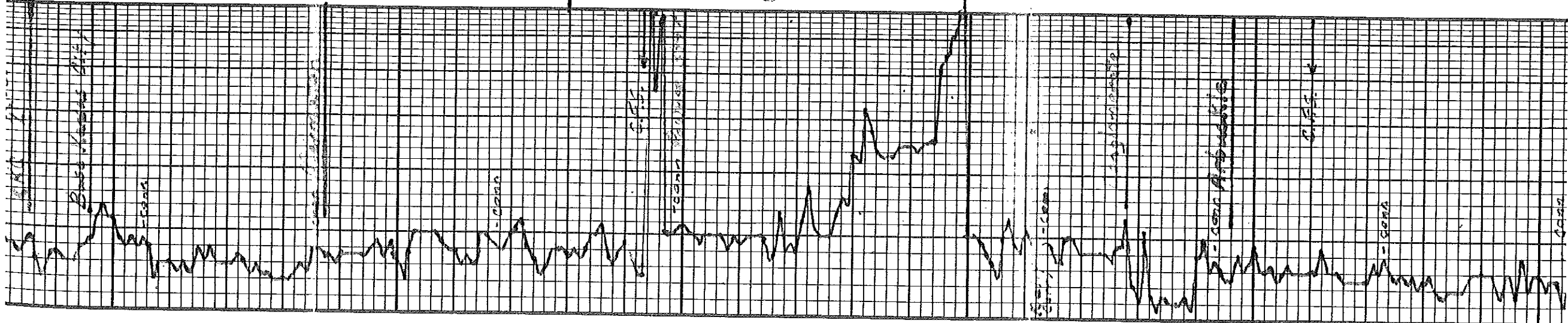
LOG 7710

OIL SHOWS	SAMPLE DESCRIPTIONS						REMARK
LITHOLOGY	DEPTH						REMARK
	1800	20	40				



90	2:10 sandstone LS: white to grey mild clay dms N.S.O.
3400	LS: white to grey mild clay dms N.S.O. No cut
20	LS: white to grey mild clay dms N.S.O. No cut
40	LS: white to grey mild clay dms N.S.O. No cut
60	LS: white to grey mild clay dms N.S.O. No cut
80	LS: white to grey mild clay dms N.S.O. No cut
3600	LS: white to grey mild clay dms N.S.O. No cut
20	LS: white to grey mild clay dms N.S.O. No cut
40	LS: white to grey mild clay dms N.S.O. No cut
60	LS: white to grey mild clay dms N.S.O. No cut
80	LS: white to grey mild clay dms N.S.O. No cut
3600	LS: white to grey mild clay dms N.S.O. No cut
20	LS: white to grey mild clay dms N.S.O. No cut
40	LS: white to grey mild clay dms N.S.O. No cut
40	LS: white to grey mild clay dms N.S.O. No cut

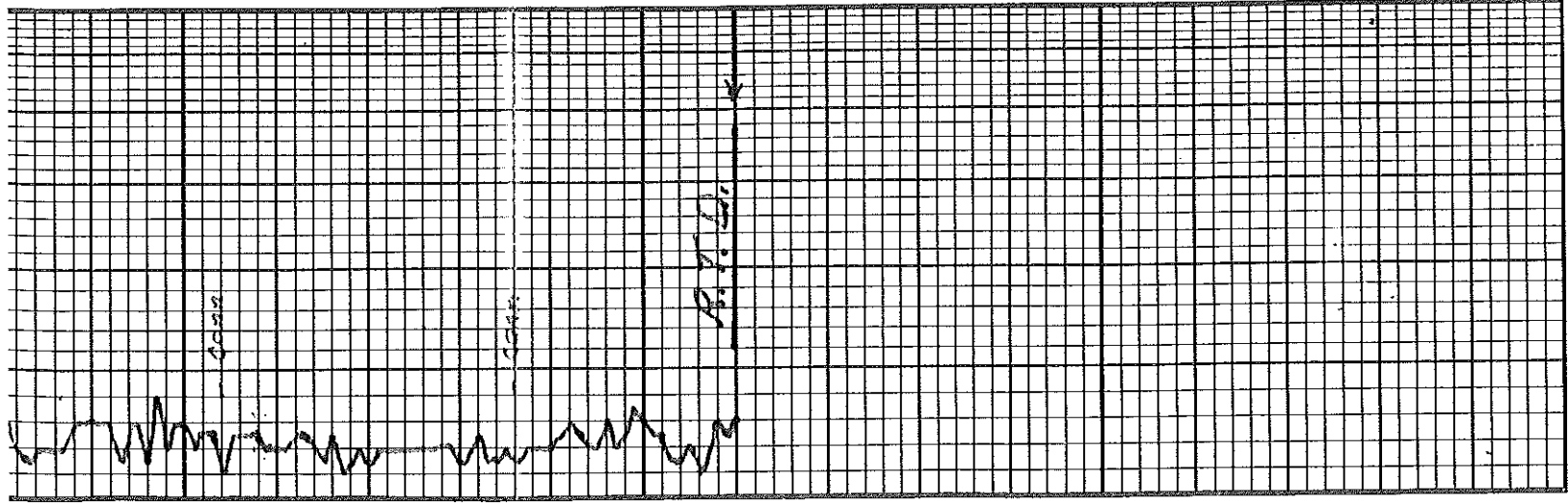
D.S.T. #1 360-
10-30-30-
I.F. wk below in
F.F. wk below in
Recovery: 10%
oil Spks in
H.H.: 1738-17
F.P.: 13-18/18
S.H.O.: 27-27
B.H. Temp: 78.4



shibrn, gry	LS: wh-stn sli: cky-fdm-fairly sh	40
shibrn, gry	shibrn, gry	60
shibrn, gry	shibrn, gry	80
shibrn, gry	shibrn, gry	3900
shibrn, gry	shibrn, gry	20
shibrn, gry	shibrn, gry	40
shibrn, gry	shibrn, gry	60
shibrn, gry	shibrn, gry	80
shibrn, gry	shibrn, gry	4000
shibrn, gry	shibrn, gry	20
shibrn, gry	shibrn, gry	40
shibrn, gry	shibrn, gry	60
shibrn, gry	shibrn, gry	80
shibrn, gry	shibrn, gry	4100

D.S.T. #3 3930
 10-30-30-90
 IF: wk blow incr. to
 FF: wk blow incr. to
 Recovery: 62.7
 2. Oil 10070
 60.00M 107.0
 Hyd: 1958-191
 FP: 20-29/32
 BHP: 864-880
 BHTemp: 100%

POWACO CORE 56



Dol: ara.	Dol: wh-to-fkh-maln PPP VSY# N.S.O.	Dol: wh-to-fkh PPP To glauc SPK N.S.O.	Dol: an. shi: chy To Sh: brn, Spn	Dol: an. shi: chy N.S.O.	Dol: wh-to-pk-fkh PPP N.S.O.													
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4100 20 40 60

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 3930

Date	12/17/10	Sec.	2	Twp.	11	Range	23	County	Trego	State	KS	On Location		Finish	6:45 PM
Lease	Hemmett 24-9			Well No.	1			Location	Ogallah, 3N, 4W, 2N, N+E into						
Contractor	W.W. Drilling Rig #8							Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Type Job	Surface							Charge To	Mc Elvain, Oil + Gas, Inc.						
Hole Size	12 1/4"			T.D.	267'			Street	1050 17th St Ste 1800						
Csg.	8 5/8" 24#			Depth	267'			City	Denver			State	Co 80266-1801		
Tbg. Size				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Tool				Shoe Joint				Cement Amount Ordered	160sxc Com 3 1/2" 2 1/2" gel						
Cement Left in Csg.	15'			Displace	16 1/4 Bbls.										

EQUIPMENT

Pumptrk	1	No.	Cement Helper	Paul	Common	160
Bulktrk	10	No.	Driver	Neale	Poz. Mix	
Bulktrk	PV	No.	Driver	Cory	Gel.	3

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
Cement Circulated	Sand
	Handling 168
	Mileage

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Thank You!

[Signature]

X Signature

Pumptrk Charge Surface
Mileage 37

Tax
Discount
Total Charge

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 470

Date <u>1-12-16</u>	Sec. <u>24</u>	Twp. <u>11</u>	Range <u>23</u>	County <u>Free</u>	State <u>KS</u>	On Location	Finis
Lease <u>Hemmett 249</u>		Well No. <u>1</u>		Location <u>Opalok 3rd 4th 22nd</u>			
Contractor <u>Wet</u>				Trap Stage			
Type Job <u>DV Job</u>				Owner			
Hole Size <u>7 7/8</u>				To Quality Oilwell Cementing, Inc.			
Csg. <u>4 1/2 105th</u>				You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as list			
Tbg. Size				Charge To <u>Maintenance</u>			
Tool <u>DV Tool</u>				Street			
Cement Left in Csg.				City			
Meas Line				State			
Displace <u>2.216</u>				The above was done to satisfaction and supervision of owner agent or contr			
				Cement Amount Ordered <u>360 QMDC 1/4 th Flow</u>			

EQUIPMENT

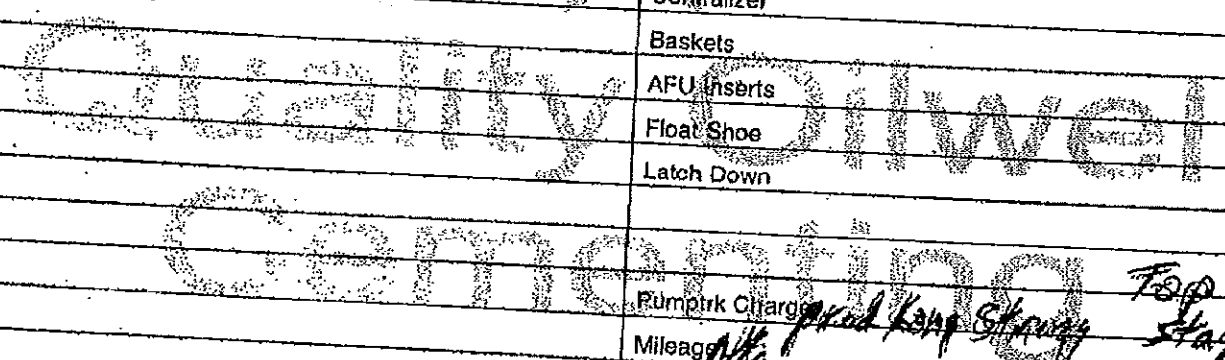
Pumptrk	No.	Cementor	Helper	Common	
Bulktrk	No.	Driver	Driver	<u>360 QMDC</u>	
Bulktrk	No.	Driver	Driver	Poz. Mix	
				Gel.	

JOB SERVICES & REMARKS

Remarks:	Calcium
Pat Hole	Hulls
Mouse Hole	Salt
Centralizers	Flowseal <u>90#</u>
Baskets	Kol-Seal
D/V or Port Collar	Mud CLR 48
<u>Cir 1 1/2 hr Plug Patch 305k</u>	CFL-117 or CD110 CAF 38
<u>Cement top stage</u>	Sand
<u>Cement Cir</u>	Handling <u>360 27 miles</u>
<u>plug landed @ 1200 psi</u>	Mileage

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	



Pumptrk Charge prod King Springs Top Stage
Mileage Wt

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Home Office P.O. Box 32 Russell, KS 67665

No. 4708

Phone 785-483-2025
Cell 785-324-1041

Date	1-12-11	Sec.	24	Twp.	11	Range	23	County	Trego	State	KS	On Location		Finish	3:00 PM
Lease	Hemmer Well No. 1							Location Ogallah 3N 4W 2E							
Contractor	WV #8 Bottom stage							Owner To Quality Oilwell Cementing, Inc.							
Type Job	DU Job							You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as list							
Hole Size	T.D. 4 1/2"							Charge To McElvain O.D. & Gas prop.							
Csg.	Depth 4159							Street							
Tbg. Size	Depth							City							
Tool	DU Tool							State							
Cement Left in Csg.	23							The above was done to satisfaction and supervision of owner agent or cont							
Meas Line	370BL							Shoe Joint 22							
EQUIPMENT							Cement Amount Ordered 260 com 3% CC 2% gel 1/4"								
Pumptrk	No.	Cementor	28" diam					500 gal mud clear 1/4"							
Bulktrk	No.	Driver						Common 260							
Bulktrk	No.	Driver						Foz. Mix							
JOB SERVICES & REMARKS							Gel. 5								
Remarks:								Calcium 9							
Rat Hole								Hulls							
Mouse Hole								Salt							
Centralizers								Flowseal 65#							
Baskets								Kol-Seal							
DN or Port Collar								Mud CLR 48 500 gal							
4 1/2 set @ 4159 insert 4136							CFL-117 or CD110 C-38								
Est Circulating pump 500 gal mud clear							Sand								
98 mm 260 set Displace 32/100							Handling 274 37 miles								
Water 2 1/2 gal mud							Mileage								
Plug/under @ 1200 psi							FLOAT EQUIPMENT								
Released plug & dry							Guide Shoe 4 1/2 AFU Float Shoe								
							Centralizer DU Tool								
							Baskets 8 Turbolizer								
							AFU Inserts 1 Basket								
							Float Shoe These work								
							Latch Down								
							Pumptrk Charge prod long string Bottom stage								
							Mileage 37								
							Tax								
							Discount								

Schlumberger

Company: **McElvain Oil & Gas, Inc**

Well: **Hemmert 24-9 #1**

Field: **Mong**

County: **Trego**

State: **Kansas**

**Platform Express
Compensated Neutron
Litho Density**

County: Trego
Field: Mong
Location: Sec. 24, T11S, R23W
Well: Hemmert 24-9 #1
Company: McElvain Oil & Gas, Inc

LOCATION		Elev.:	K.B.	2364.00 ft
Sec. 24, T11S, R23W			G.L.	2359.00 ft
SHL: 1480' FSL X 680' FWL NESE			D.F.	2363.00 ft
Lat/Long:		Permanent Datum:	Ground Level	
		Log Measured From:	Kelly Bushing	5.00 ft
		Drilling Measured From:	Kelly Bushing	above Perm. Datum
API Serial No.	Section	Township	Range	
15-195-22693-000C	24	11S	23W	

Logging Date	10-Jan-2011			
Run Number	1			
Depth Driller	4160 ft			
Schlumberger Depth	4160 ft			
Bottom Log Interval	4152 ft			
Top Log Interval	267 ft			
Casing Driller Size @ Depth	8.625 in @ 267 ft			
Casing Schlumberger	267 ft			
Bit Size	7.875 in			
Type Fluid In Hole	Water Based Mud			
Density	9.4 lbm/gal	56 s		
Fluid Loss	8.8 cm3	8		
Source Of Sample	AIT Sensor			
RM @ Measured Temperature	0.807 ohm.m	@	77 degF	@
RMF @ Measured Temperature	0.605 ohm.m	@	77 degF	@
RMC @ Measured Temperature	1.211 ohm.m	@	77 degF	@
Source RMF	Calculated	Calculated		
RM @ MRT	0.603 @ 106	0.452 @ 106		@
Maximum Recorded Temperatures	106 degF			
Circulation Stopped	10-Jan-2011	20:15		
Logger On Bottom	10-Jan-2011	22:35		
Unit Number	3021	Fort Morgan		
Recorded By	Phillip Grant			
Witnessed By	Richard Ball			

Run 1	Run 2	Run
-------	-------	-----

DEPTH SUMMARY LISTING

Date Created: 10-JAN-2011 23:32:04

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 3713 Calibration Date: 13-Sep-2009 Calibrator Serial Number: 33 Calibration Cable Type: 7-39P LXS Wheel Correction 1: -7 Wheel Correction 2: -5	Type: CMTD-B/A Serial Number: 2787 Calibration Date: 8-DEC-2010 Calibrator Serial Number: 100513 Number of Calibration Points: 10 Calibration RMS: 26 Calibration Peak Error: 40	Type: 7-39P LXS Serial Number: 6171 Length: 14600 FT Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	0.00 FT
Rig Up Length At Bottom:	0.00 FT
Rig Up Length Correction:	0.00 FT
Stretch Correction:	2.00 FT
Tool Zero Check At Surface:	0.00 FT

Depth Control Remarks

1.	All Schlumberger depth policy procedures applied
2.	This is the primary depth reference
3.	
4.	
5.	
6.	

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1	OTHER SERVICES2
OS1: FMI-Sonic Scanner	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
This is the first run in hole.	
Tool run as per tool sketch.	
Data may be affected by hole rugosity	
Matrix: Limestone 2.71	

Anhydrite zone: 1810'-1885' and 2180'-2272'

Crew: Ian Derry, Tim Ludgate

Rig: W-W Drilling 11

RUN 1			RUN 2		
SERVICE ORDER #:		BE0K-00118	SERVICE ORDER #:		
PROGRAM VERSION:		18C0-147	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION




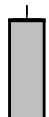

RUN 1 RUN 2

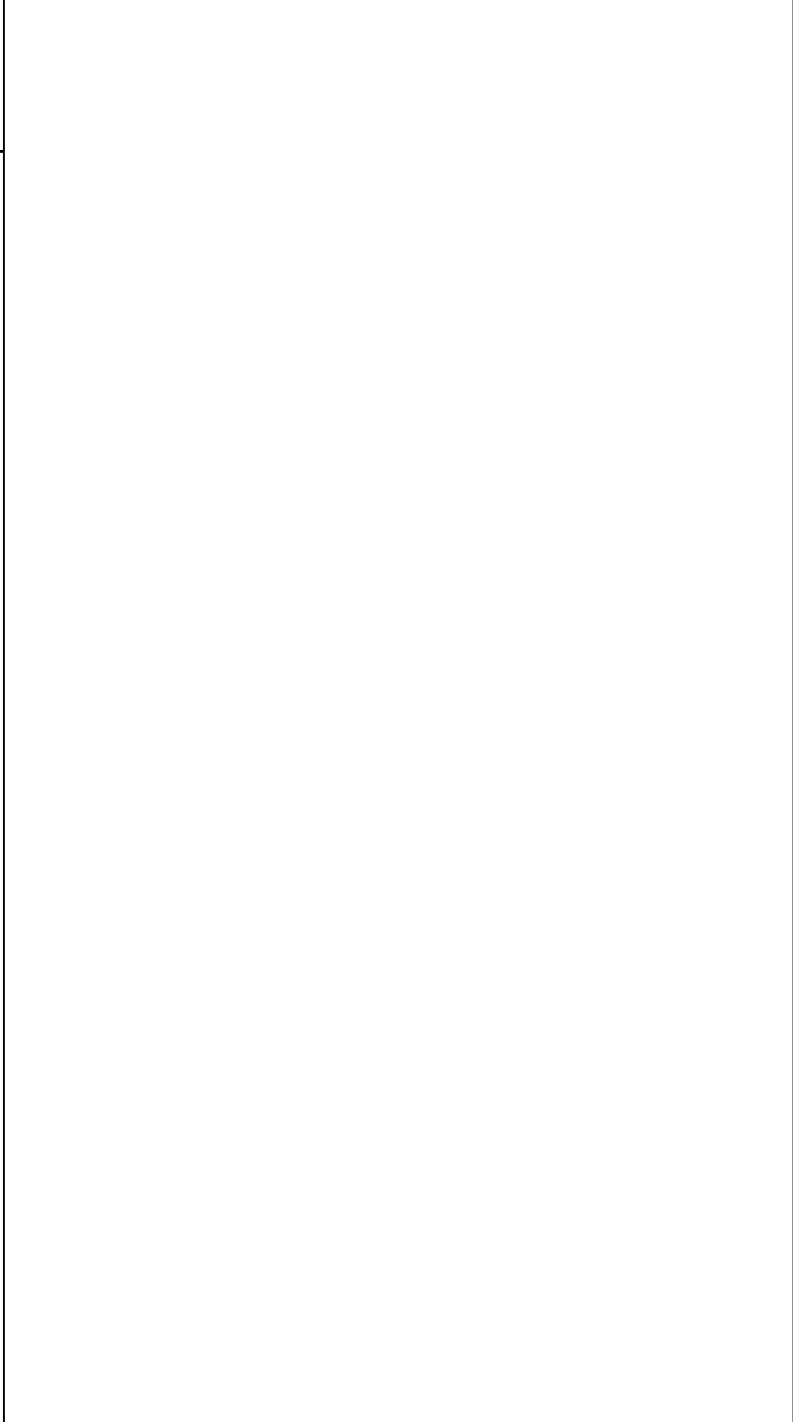
SURFACE EQUIPMENT

GSR-U/Y
NCT-B
CNB-AB
NCS-VB

GSR-U
WITM (DTS)-A

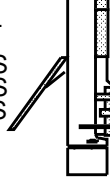
DOWNHOLE EQUIPMENT

LEH-QT LEH-QT			55.3
DTC-H ECH-KC DTCH0-A DTCH1-A	CTEM TelStatus ToolStatu		51.4 49.3
HNGS-BA HNGS-BA 169 HNSH-BA 169	Upper_1 Lower_2		47.1 46.4
HNGC-B HNGH-A 292 HNGC-B 292	HNGC Stat		39.4
HILTB-FTB HGNSD-B HMCA HGNH NLS-KL NSR-F 5168 HACCZ 749 HCNT HGR HRCC-B HRMS-B HRGD-B GLS-VJ 5363 MCFL Device HILT Nucl. LS 42767 HILT Nucl. SS 42767 HILT Nucl. BS 42767 BOW-SPR NPV-N	HGNS HTEM HMCA HGNS Gamm HGNS Neut HGNS Neut HGNS sens HRCC cart		37.6 37.6 31.1 30.6 28.2 24.2



MCFL
 HILT cali
 HRDD-LS
 HRDD-SS
 HRDD-BS

18.8
 18.3
 17.9



HAIT-H
 AHIS-BA 216
 AHRM-A

16.0

Induction
 Temperatu
 Power Sup

7.9

SP SENSOR
 DF
 HTEN HMAS HV
 Accelerom
 Mud Resis
 Tension

0.1

0.0

TOOL ZERO

MAXIMUM STRING DIAMETER 4.63 IN
 MEASUREMENTS RELATIVE TO TOOL ZERO
 ALL LENGTHS IN FEET

Production String	(in)		(ft)	Well Schematic	(ft)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
					0.0	8.625	8.097	Casing String
					267.0	8.625	8.097	Casing Shoe
					267.0	7.875		Borehole Segment

All Depths are Drillers

Schlumberger

MAIN POROSITY LOG 5" = 100'

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	10-Jan-2011 22:32	4170.0 FT	215.5 FT
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Integrated Hole/Cement Volume Summary

Hole Volume = 330.19 ft³

Cement Volume = 234.72 ft³ (assuming 4.50 in casing O.D.)

Computed from 4159.5 ft to 3295.5 ft

OP System Version: 18C0-147

HAIT	SRPC-4042-Q3_2010_OP18	HILTD	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTCH	18C0-147		

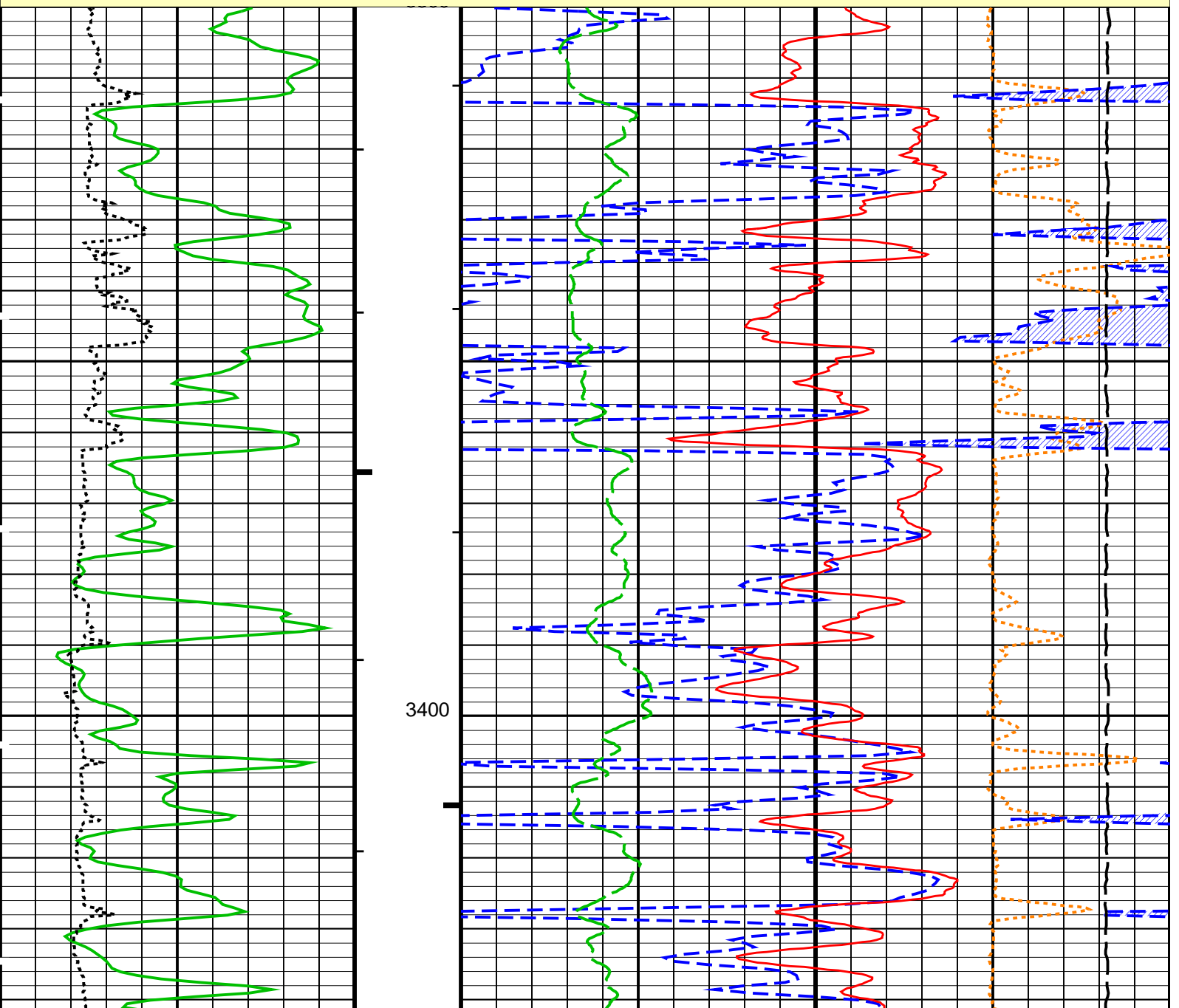
PIP SUMMARY

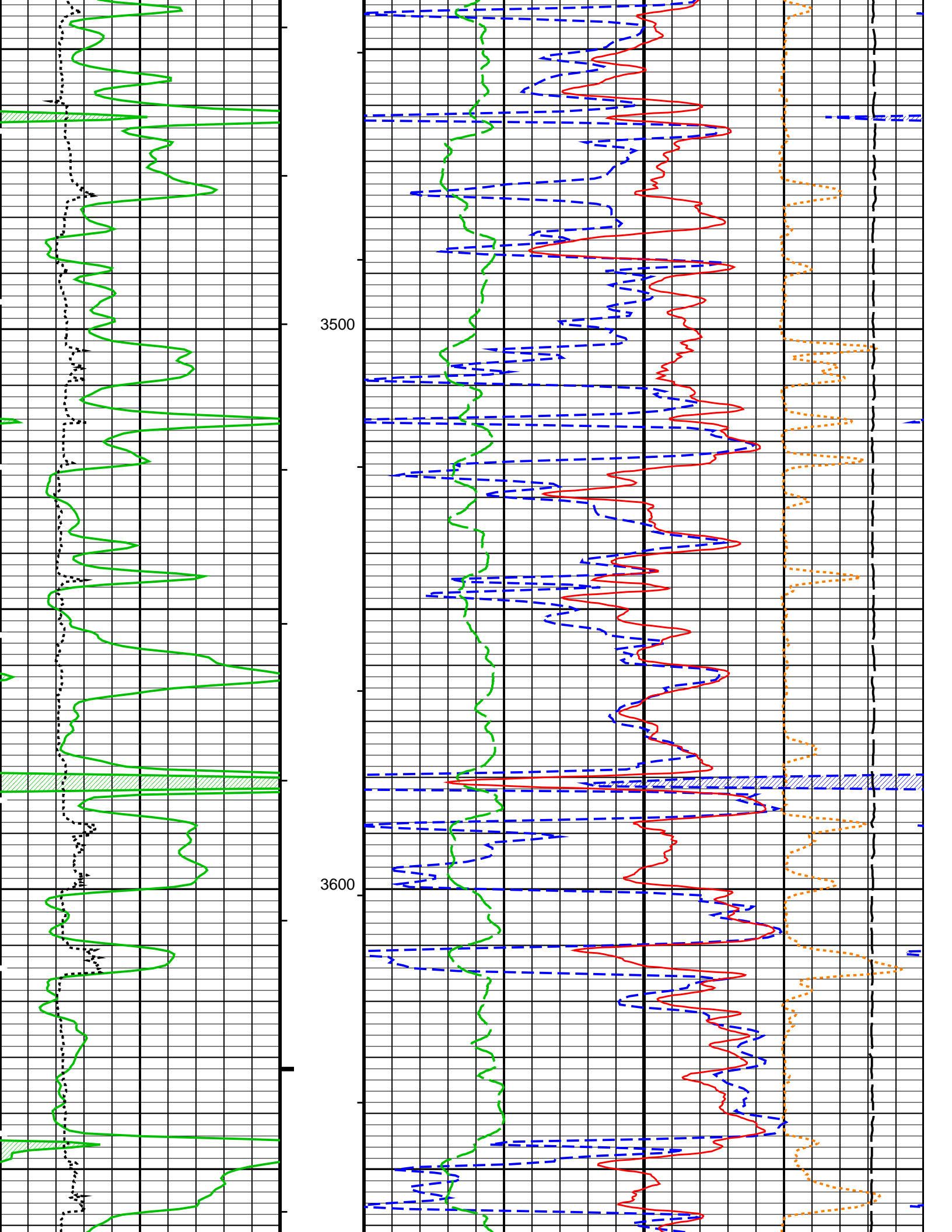
- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

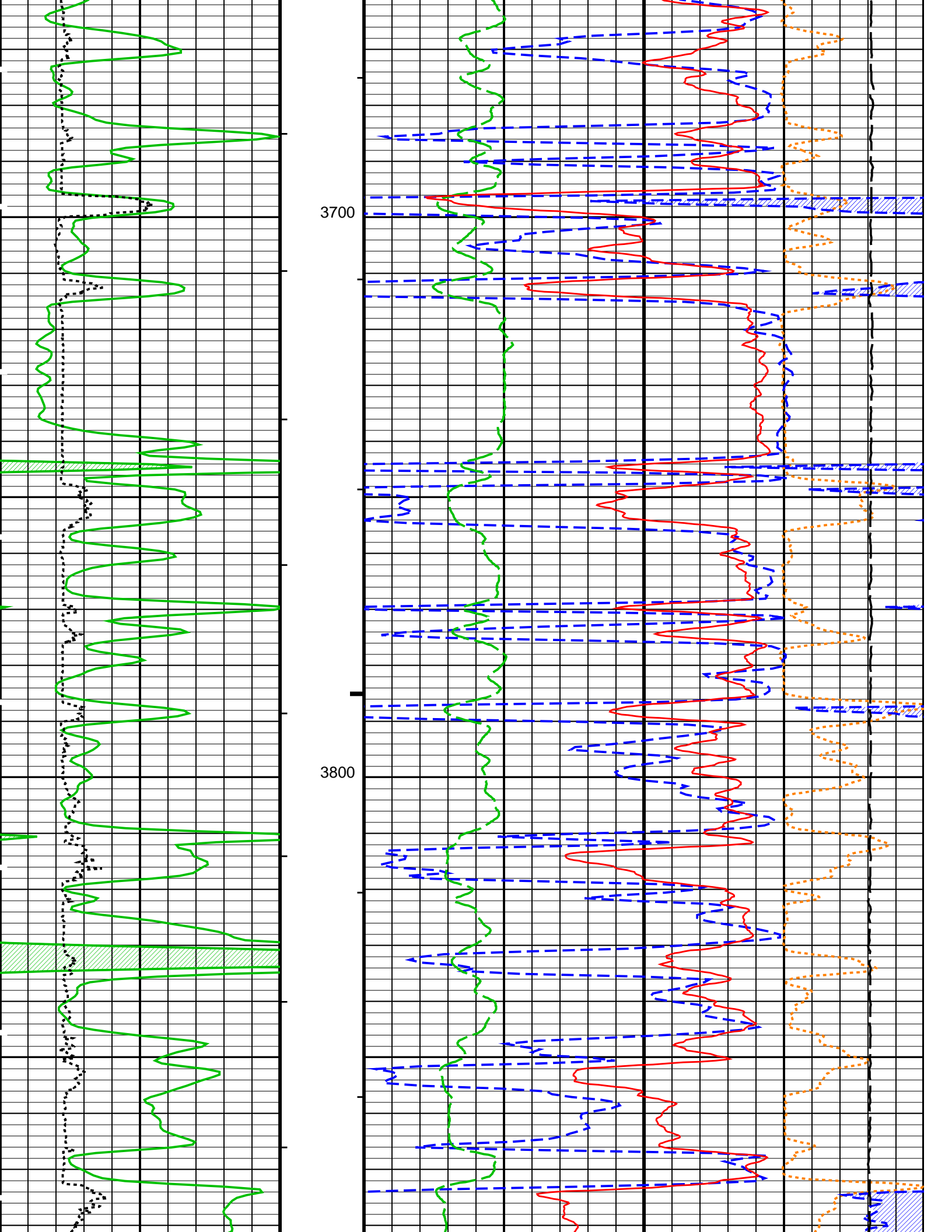
Time Mark Every 60 S

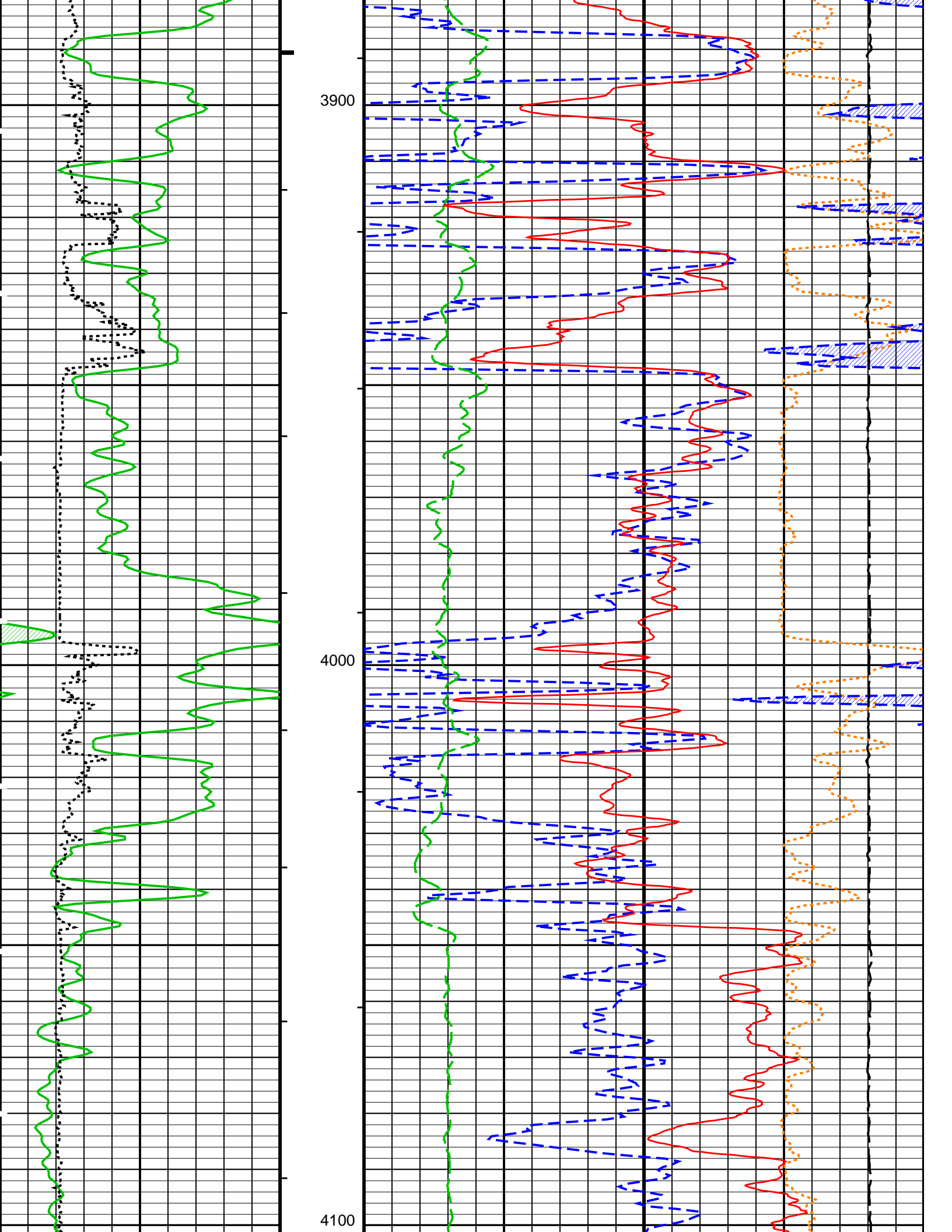
		Tension (TENS)	
		(LBF)	
		10000	0
NPOR Backup			
Caliper (HCAL) (IN)	Stuck Stretch (STIT) (F) 50	Std. Res. Formation Density (RHOZ) (G/C3)	
6	0	2	3
16	50		
Gamma Ray (GR) (GAPI)	Tool/Tot. Drag	Std. Res. Formation Pe (PEFZ) (-----)	Density Correction (HDRA) (G/C3)
0	0	10	-0.25
150	10		
Gamma Ray Backup	Cable Drag	Alpha Processed Neutron Porosity (NPOR) (V/V)	
0.3	0.3	-0.1	

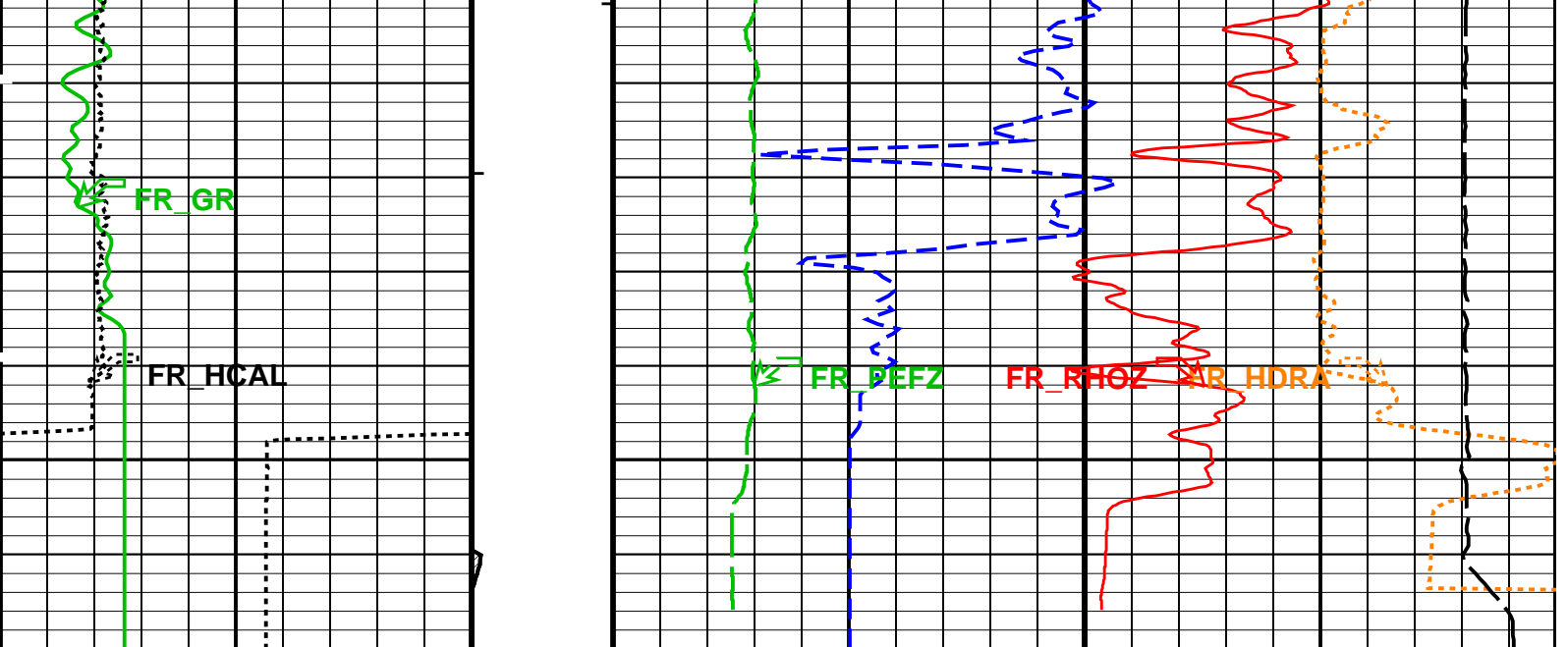
MAIN PASS: *** PLATFORM EXPRESS - NUCLEAR POROSITY ***











MAIN PASS: *** PLATFORM EXPRESS - NUCLEAR POROSITY ***

Gamma Ray Backup		Cable Drag	Alpha Processed Neutron Porosity (NPOR)	
			0.3	(V/V) -0.1
Gamma Ray (GR)	(GAPI) 150	Tool/Tot. Drag	Std. Res. Formation Pe (PEFZ)	Density Correction (HDRA)
0			0	-0.25 (G/C3) 0.25
Caliper (HCAL)	(IN) 16	Stuck Stretch (STIT)	Std. Res. Formation Density (RHOZ)	
6		0 (F) 50	2	(G/C3) 3
		NPOR Backup		
		Tension (TENS)		
		10000 (LBF) 0		

PIP SUMMARY

- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HAIT-H: Array Induction Tool - H		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0.000 deg
GGRD	Geothermal Gradient	0.010 degF/ft
MATR	Rock Matrix for Neutron Porosity Corrections	LIME
SHT	Surface Hole Temperature	68.000 degF
HILTB-FTB: High resolution Integrated Logging Tool-DTS		
BHFL	Borehole Fluid Type	WATER
BHFL_TLD	HILT Nuclear Mud Base	WATER
BHS	Borehole Status	OPEN
BSCO	Borehole Salinity Correction Option	NO
CCCO	Casing & Cement Thickness Correction Option	NO
DHC	Density Hole Correction	BS
FSCO	Formation Salinity Correction Option	NO
GCLF	Germany Coal-like Formation Option	NO
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0.000 deg
GGRD	Geothermal Gradient	0.010 degF/ft
HSCO	Hole Size Correction Option	YES
MATR	Rock Matrix for Neutron Porosity Corrections	LIME
MCCO	Mud Cake Correction Option	NO

MCOR	Mud Correction	NATU	NO	
MWCO	Mud Weight Correction Option		OFF	
NAAC	HRDD APS Activation Correction			
NMT	HILT Nuclear Mud Type	NOBARITE		
NPRM	HRDD Processing Mode	HIRES		
NSAR	HRDD Depth Sampling Rate	1.000	in	
PTCO	Pressure/Temperature Correction Option	NO		
SDAT	Standoff Data Source	SOCN		
SHT	Surface Hole Temperature	68.000	degF	
SOCN	Standoff Distance	0.125	in	
SOCO	Standoff Correction Option	YES		
HNGS-BA: Hostile Natural Gamma Ray Sonde				
BHS	Borehole Status	OPEN		
GCSE	Generalized Caliper Selection	HCAL		
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg	
GGRD	Geothermal Gradient	0.010	degF/ft	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME		
SHT	Surface Hole Temperature	68.000	degF	
STI: Stuck Tool Indicator				
STKT	STI Stuck Threshold	2.500	ft	
TDD	Total Depth - Driller	4160.0	ft	
TDL	Total Depth - Logger	4160.0	ft	
HOLEV: Integrated Hole/Cement Volume				
BHS	Borehole Status	OPEN		
GCSE	Generalized Caliper Selection	HCAL		
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg	
GGRD	Geothermal Gradient	0.010	degF/ft	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME		
SHT	Surface Hole Temperature	68.000	degF	
PERT: Preliminary Evaluation - Real Time				
BHS	Borehole Status	OPEN		
GCSE	Generalized Caliper Selection	HCAL		
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg	
GGRD	Geothermal Gradient	0.010	degF/ft	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME		
SHT	Surface Hole Temperature	68.000	degF	
System and Miscellaneous				
BS	Bit Size	7.875	in	
BSAL	Borehole Salinity	3700.0	ppm	
CSIZ	Current Casing Size	8.625	in	
CWEI	Casing Weight	24.000	lbm/ft	
DFD	Drilling Fluid Density	9.400	lbm/gal	
FSAL	Formation Salinity			
MST	Mud Sample Temperature	77.105	degF	
RMFS	Resistivity of Mud Filtrate Sample	0.605	ohm.m	

Format: PORO Vertical Scale: 5" per 100' Graphics File Created: 11-Jan-2011 01:12

OP System Version: 18C0-147

HAIT	SRPC-4042-Q3_2010_OP18	HILTD	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTCH	18C0-147		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	10-Jan-2011 22:32	4170.0 FT	215.5 FT
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Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	10-Jan-2011 22:32	4170.0 FT	215.5 FT
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Integrated Hole/Cement Volume Summary

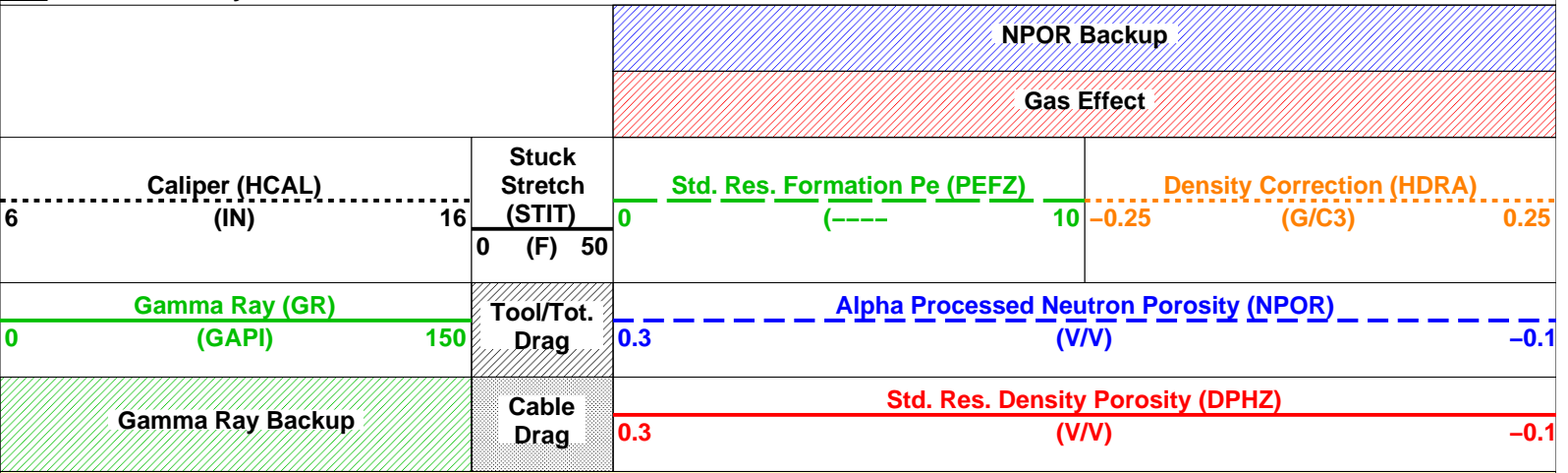
Hole Volume = 330.19 ft³
Cement Volume = 234.72 ft³ (assuming 4.50 in casing O.D.)
Computed from 4159.5 ft to 3295.5 ft

OP System Version: 18C0-147

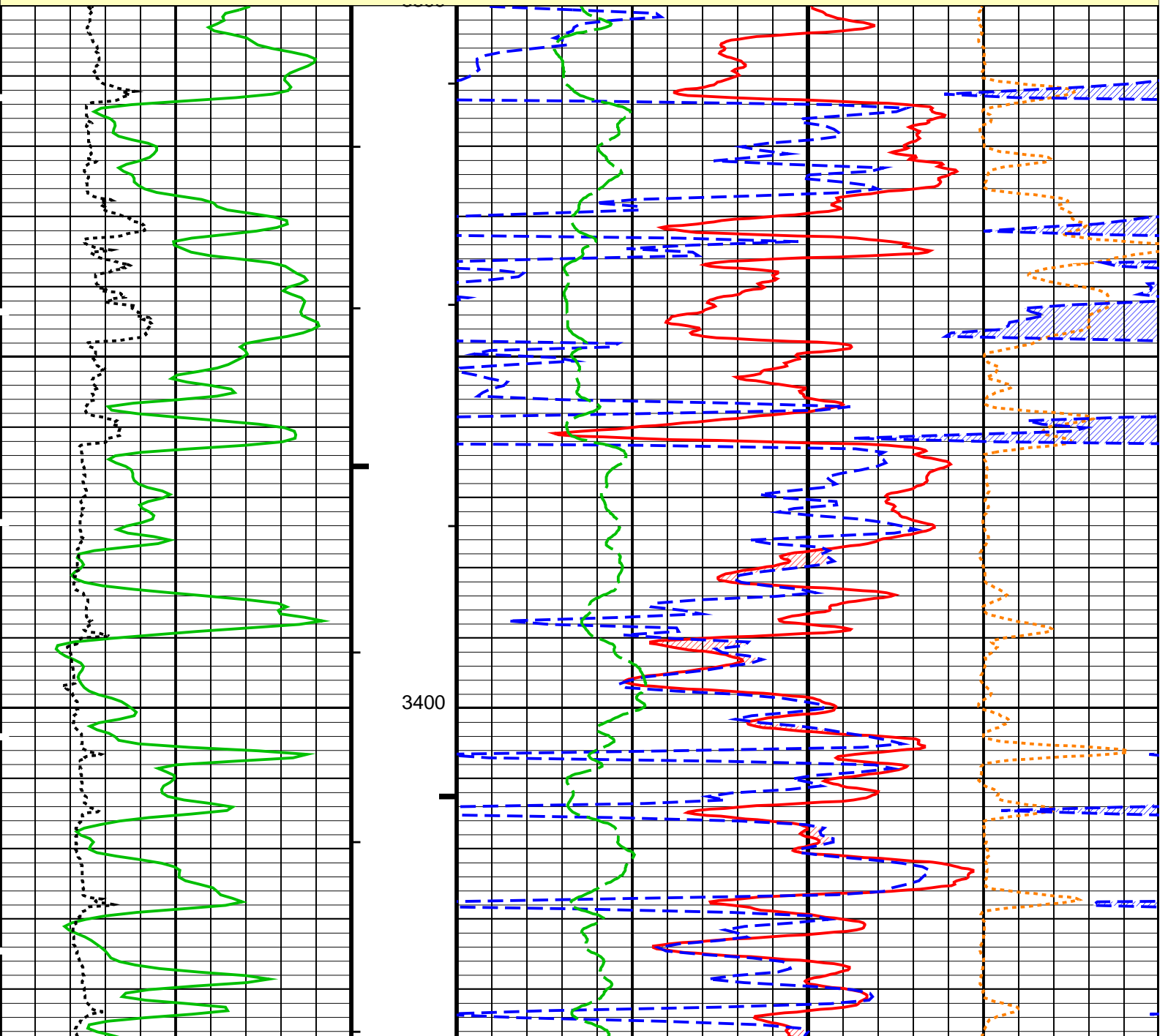
HAIT	SRPC-4042-Q3_2010_OP18	HILTD	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTCH	18C0-147		

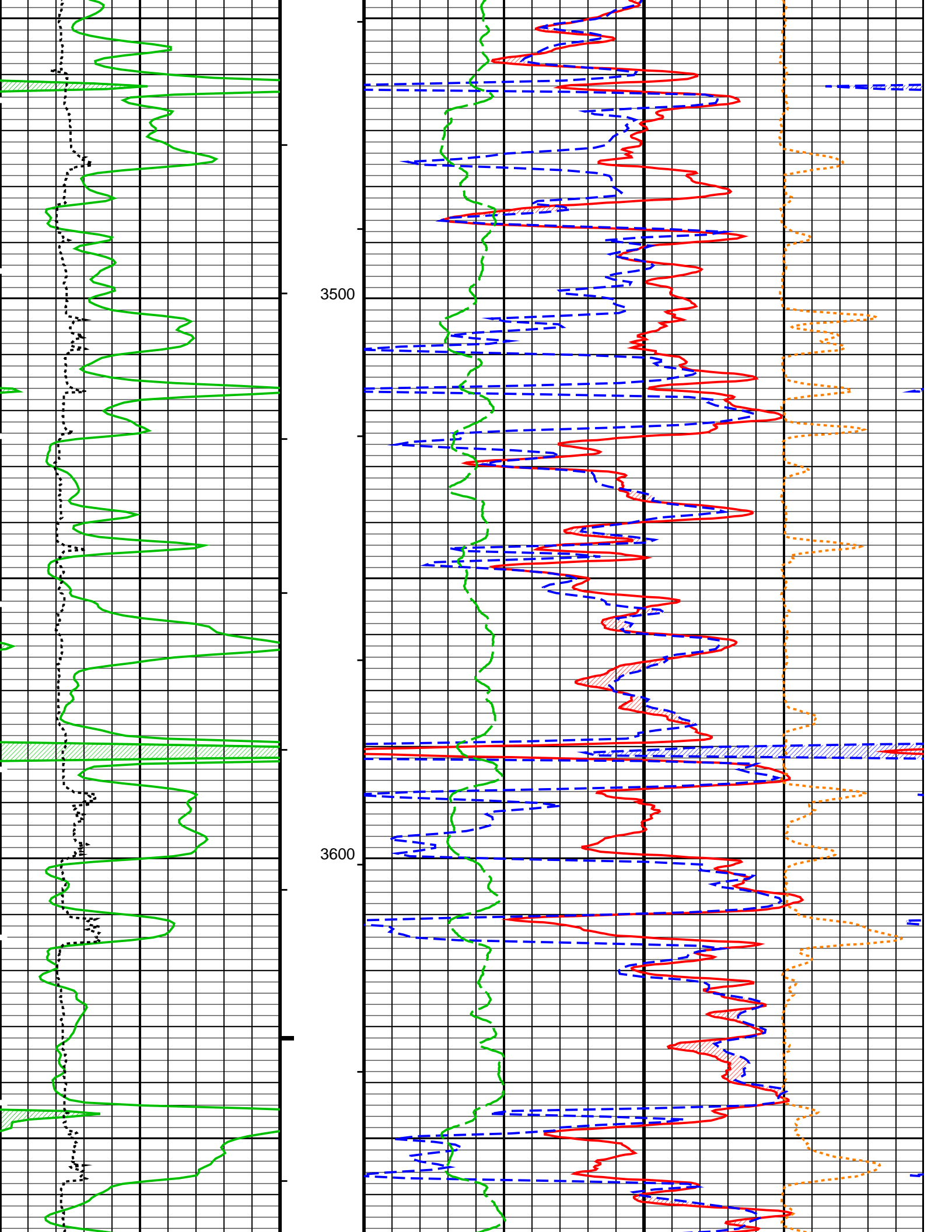
- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

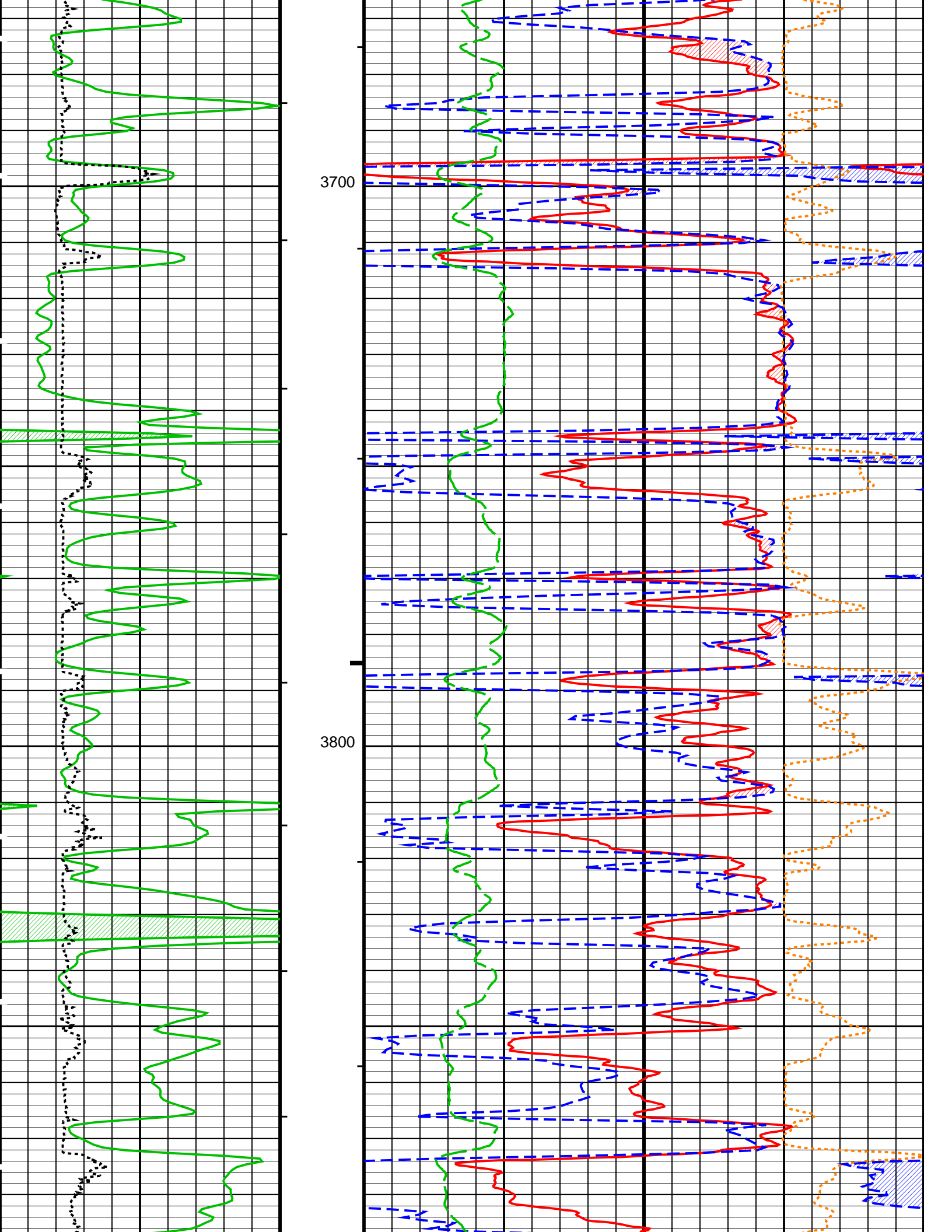
Time Mark Every 60 S

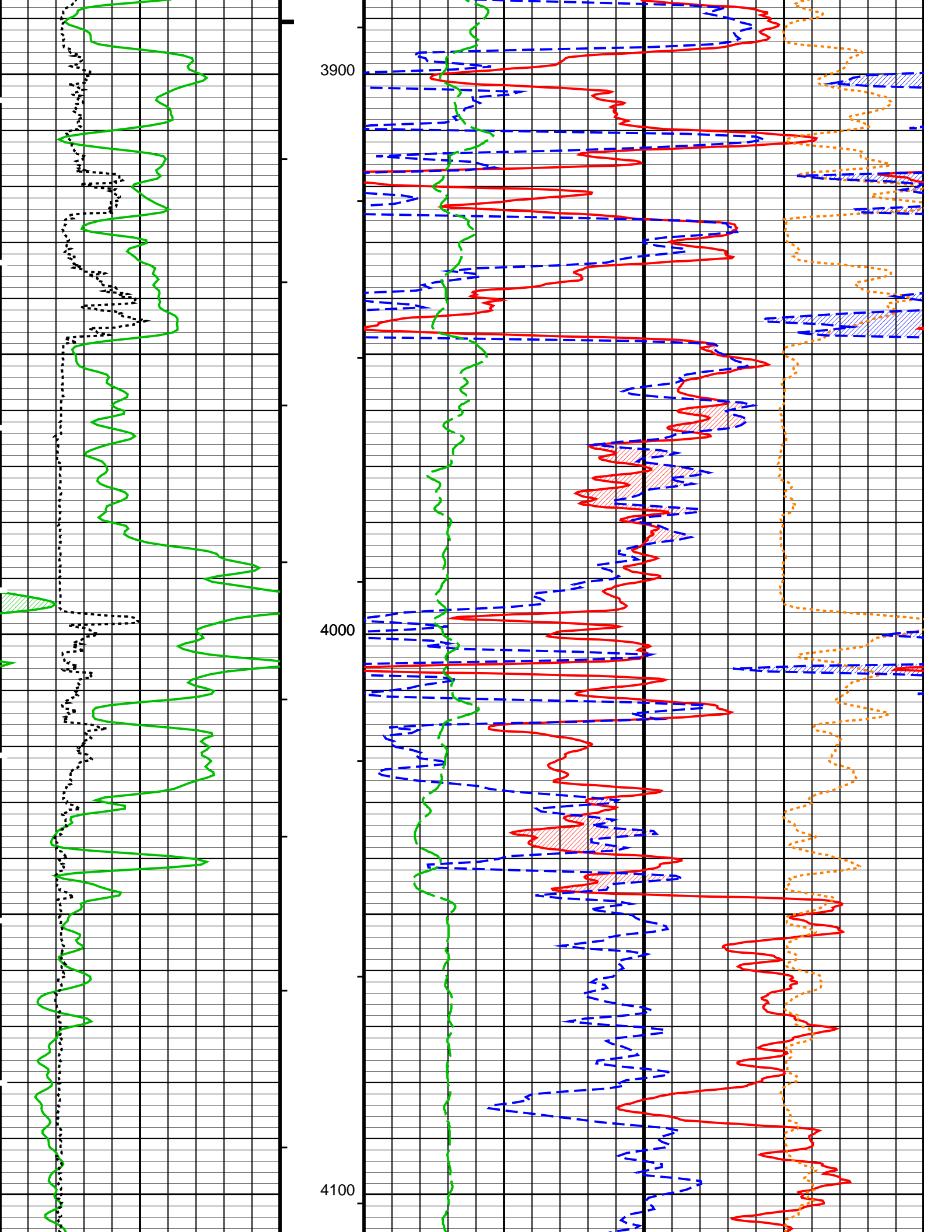


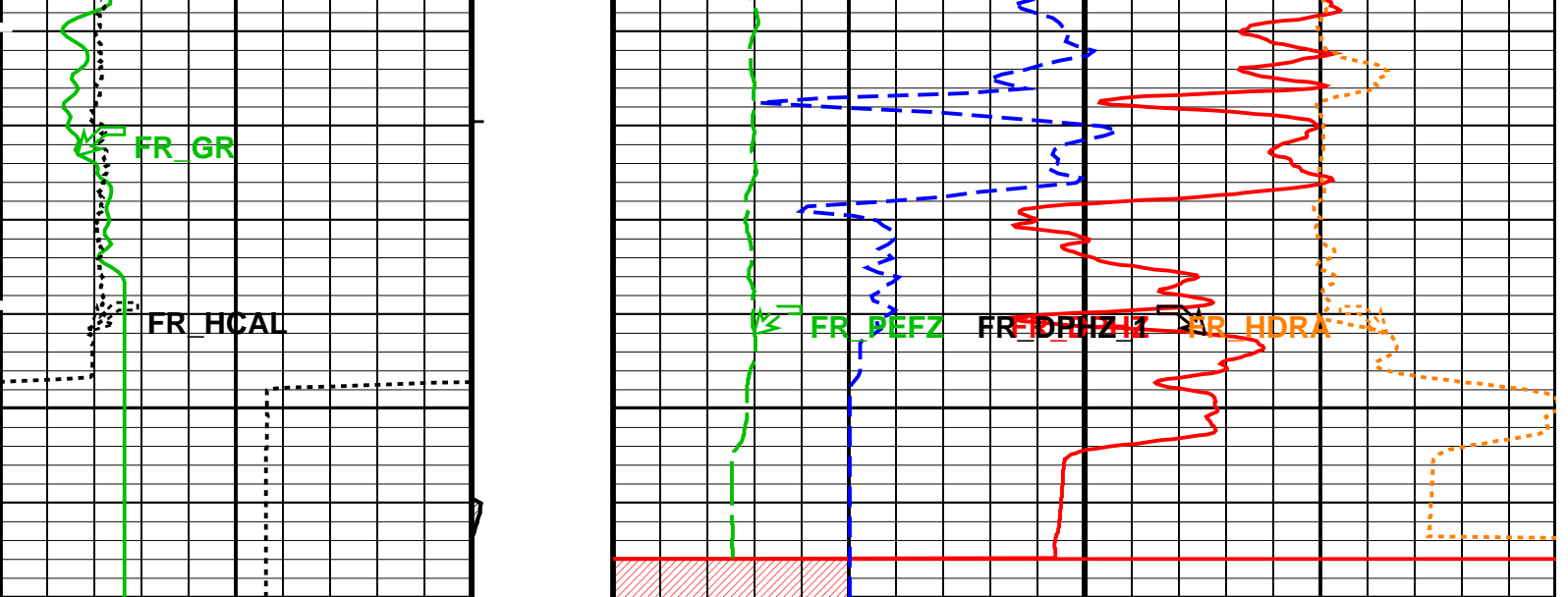
MAIN PASS: *** PLATFORM EXPRESS - NUCLEAR POROSITY ***











MAIN PASS: *** PLATFORM EXPRESS - NUCLEAR POROSITY ***

Gamma Ray Backup	Cable Drag	Std. Res. Density Porosity (DPHZ)	
		0.3	(V/V) -0.1
Gamma Ray (GR) (GAPI)	Tool/Tot. Drag	Alpha Processed Neutron Porosity (NPOR)	
0 150		0.3	(V/V) -0.1
Caliper (HCAL) (IN)	Stuck Stretch (STIT)	Std. Res. Formation Pe (PEFZ)	Density Correction (HDRA)
6 16	0 (F) 50	0 10	-0.25 (G/C3) 0.25
		Gas Effect	
		NPOR Backup	

PIP SUMMARY

- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HAIT-H: Array Induction Tool - H		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0.000 deg
GGRD	Geothermal Gradient	0.010 degF/ft
MATR	Rock Matrix for Neutron Porosity Corrections	LIME
SHT	Surface Hole Temperature	68.000 degF
HILTB-FTB: High resolution Integrated Logging Tool-DTS		
BHFL	Borehole Fluid Type	WATER
BHFL_TLD	HILT Nuclear Mud Base	WATER
BHS	Borehole Status	OPEN
BSCO	Borehole Salinity Correction Option	NO
CCCO	Casing & Cement Thickness Correction Option	NO
DHC	Density Hole Correction	BS
FD	Fluid Density	1.000 g/cm3
FSCO	Formation Salinity Correction Option	NO
GCLF	Germany Coal-like Formation Option	NO
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0.000 deg
GGRD	Geothermal Gradient	0.010 degF/ft
HSCO	Hole Size Correction Option	YES
MATR	Rock Matrix for Neutron Porosity Corrections	LIME
MCCO	Mud Cake Correction Option	NO
MCOR	Mud Correction	NATU
MDEN	Matrix Density	2.710 g/cm3

MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	HIRES	
NSAR	HRDD Depth Sampling Rate	1.000	in
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	68.000	degF
SOCN	Standoff Distance	0.125	in
SOCO	Standoff Correction Option	YES	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	68.000	degF
STI: Stuck Tool Indicator			
STKT	STI Stuck Threshold	2.500	ft
TDD	Total Depth - Driller	4160.0	ft
TDL	Total Depth - Logger	4160.0	ft
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	68.000	degF
PERT: Preliminary Evaluation - Real Time			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	68.000	degF
System and Miscellaneous			
BS	Bit Size	7.875	in
BSAL	Borehole Salinity	3700.0	ppm
CSIZ	Current Casing Size	8.625	in
CWEI	Casing Weight	24.000	lbm/ft
DFD	Drilling Fluid Density	9.400	lbm/gal
FSAL	Formation Salinity		
MST	Mud Sample Temperature	77.105	degF
RMFS	Resistivity of Mud Filtrate Sample	0.605	ohm.m

Format: PORO_2 Vertical Scale: 5" per 100' Graphics File Created: 11-Jan-2011 01:12

OP System Version: 18C0-147

HAIT	SRPC-4042-Q3_2010_OP18	HILTD	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTCH	18C0-147		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	10-Jan-2011 22:32	4170.0 FT	215.5 FT
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REPEAT ANALYSIS

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_005PUP	FN:4	PRODUCER	10-Jan-2011 22:31	4179.0 FT	3842.0 FT
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Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_005PUP	FN:4	PRODUCER	10-Jan-2011 22:31	4179.0 FT	3842.0 FT
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OP System Version: 18C0-147

HAIT-H
HNGC-B
DTC-H

SRPC-4042-Q3_2010_OP18
HFE-4001-OP18-NUCL
18C0-147

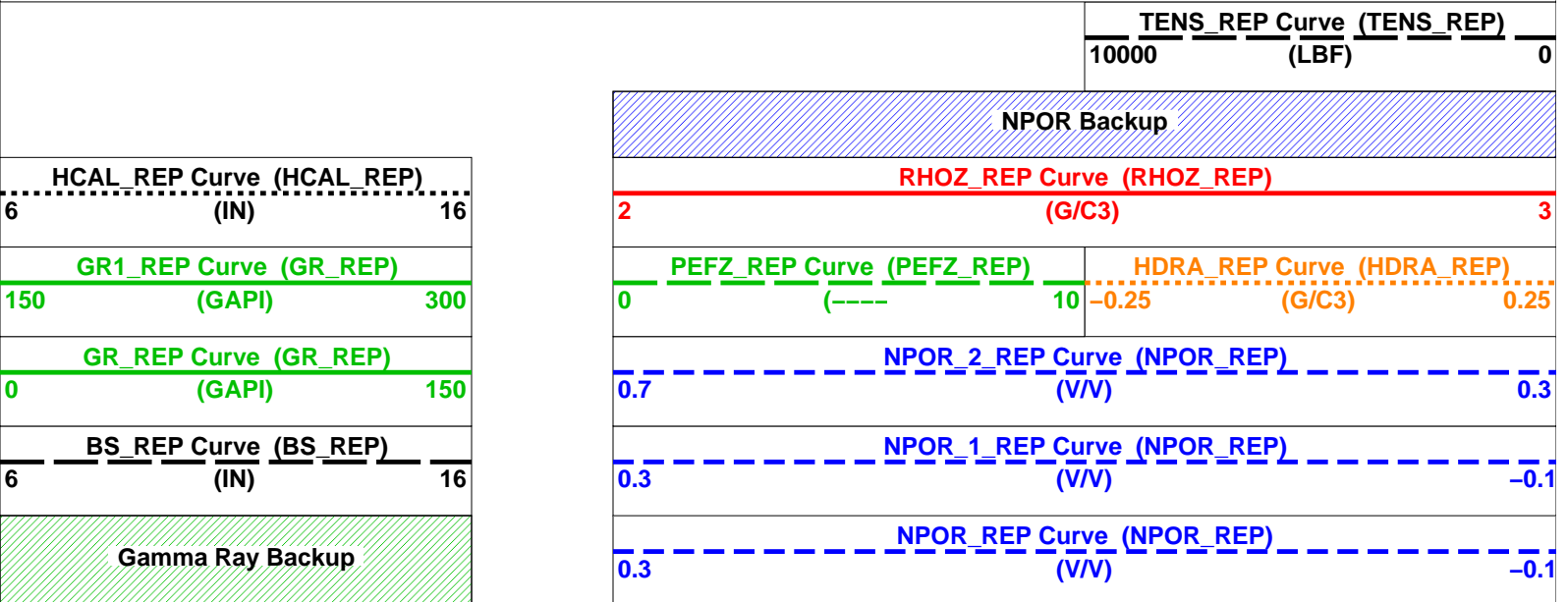
HILTB-FTB
HNGS-BA

SRPC-4042-Q3_2010_OP18
HFE-4001-OP18-NUCL

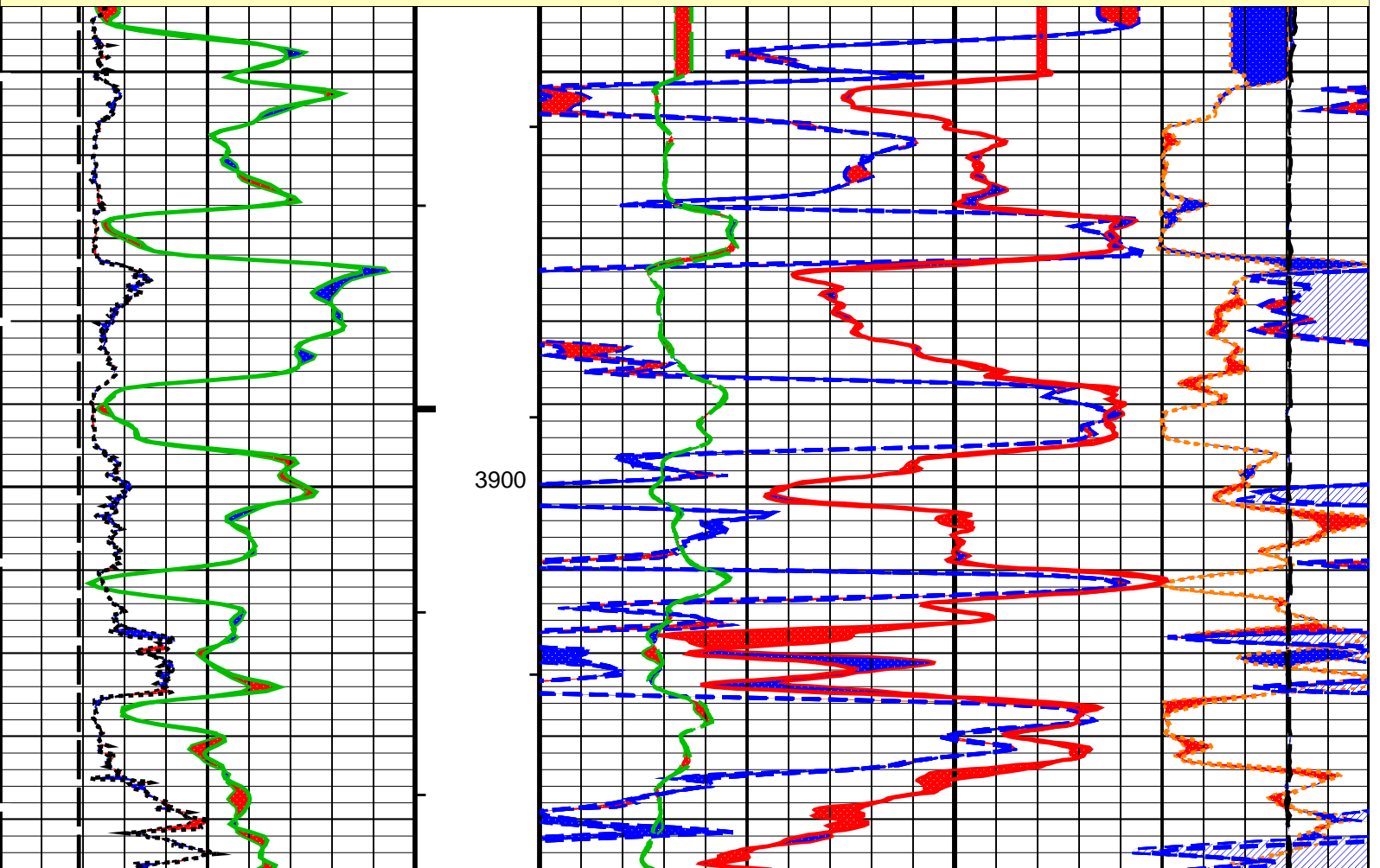
PIP SUMMARY

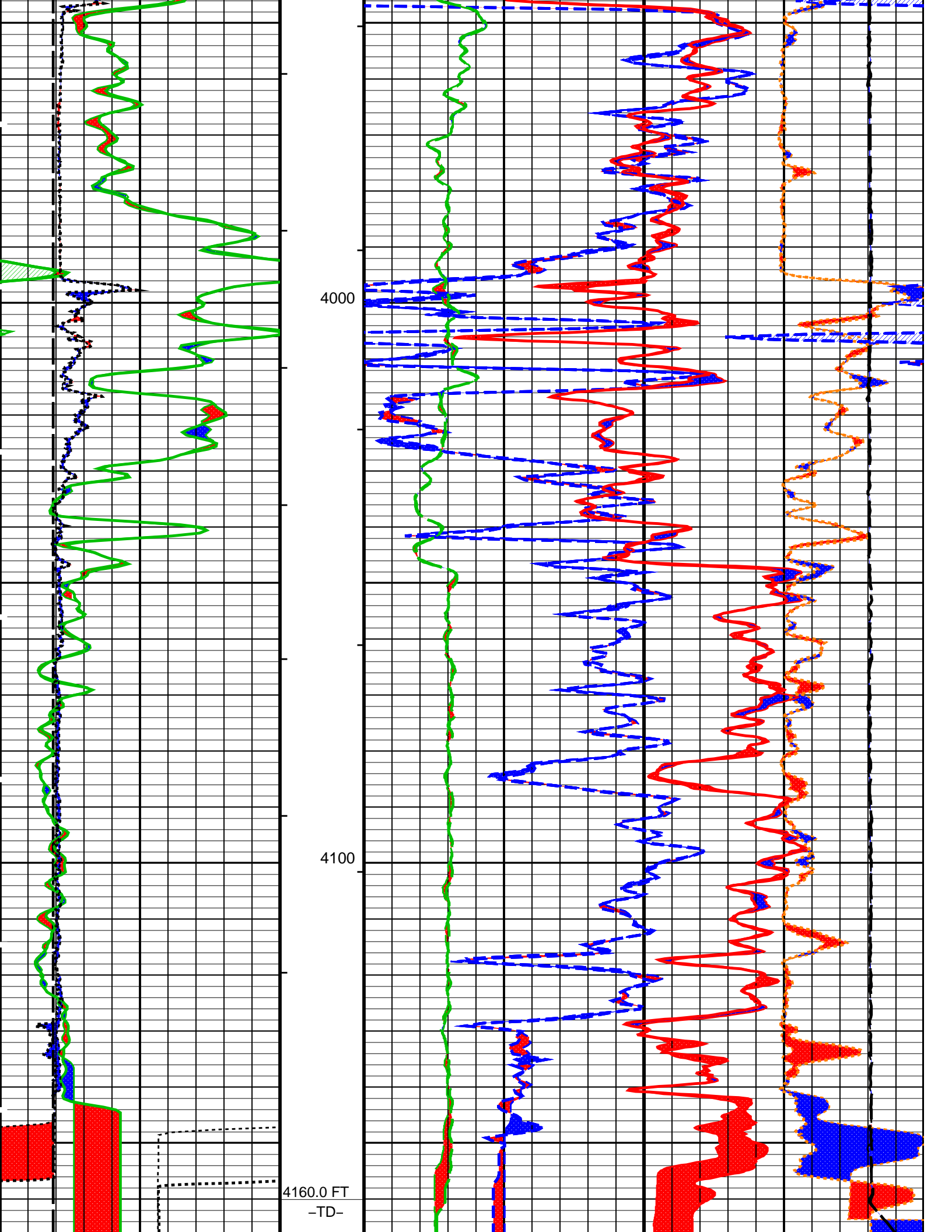
- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

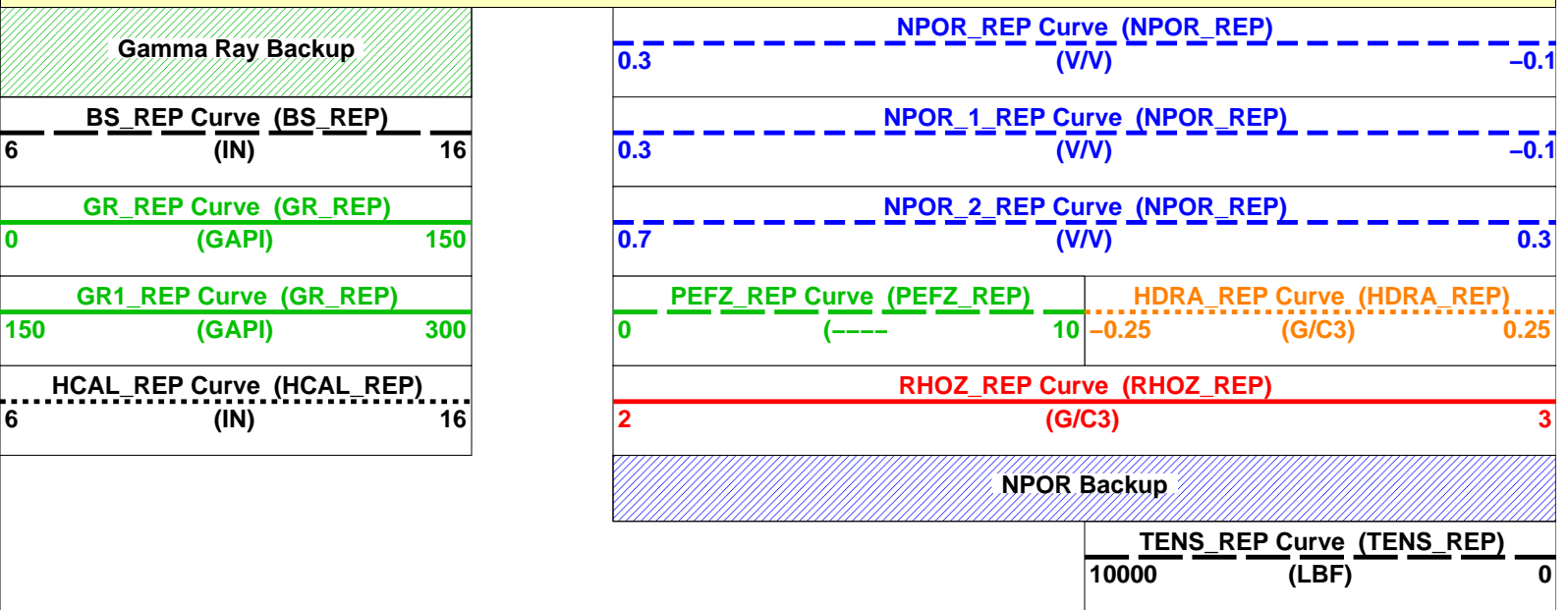


MAIN PASS: *** PLATFORM EXPRESS - NUCLEAR POROSITY ***





MAIN PASS: *** PLATFORM EXPRESS – NUCLEAR POROSITY ***



PIP SUMMARY

- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HAIT-H: Array Induction Tool – H		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
SHT	Surface Hole Temperature	68 DEGF
HILTB-FTB: High resolution Integrated Logging Tool-DTS		
BHFL	Borehole Fluid Type	WATER
BHFL_TLD	HILT Nuclear Mud Base	WATER
BHS	Borehole Status	OPEN
BSCO	Borehole Salinity Correction Option	NO
CCCO	Casing & Cement Thickness Correction Option	NO
DHC	Density Hole Correction	BS
FSAL	Formation Salinity	-50000 PPM
FSCO	Formation Salinity Correction Option	NO
GCLF	Germany Coal-like Formation Option	NO
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
HSCO	Hole Size Correction Option	YES
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
MCCO	Mud Cake Correction Option	NO
MCOR	Mud Correction	NATU
MWCO	Mud Weight Correction Option	NO
NAAC	HRDD APS Activation Correction	OFF
NMT	HILT Nuclear Mud Type	NOBARITE
NPRM	HRDD Processing Mode	HiRes
NSAR	HRDD Depth Sampling Rate	1 IN
PTCO	Pressure/Temperature Correction Option	NO
SDAT	Standoff Data Source	SOCN
SHT	Surface Hole Temperature	68 DEGF
SOCN	Standoff Distance	0.125 IN
SOCO	Standoff Correction Option	YES
HNGS-BA: Hostile Natural Gamma Ray Sonde		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
SHT	Surface Hole Temperature	68 DEGF
STI: Stuck Tool Indicator		
TDI	Total Depth Indicator	1100.00 FT

IDL	Total Depth - Logger	4160.00	FT
HOLEV:	Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
FCD	Future Casing (Outer) Diameter	4.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
PERT:	Preliminary Evaluation - Real Time		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
	System and Miscellaneous		
BS	Bit Size	7.875	IN
BSAL	Borehole Salinity	3700.00	PPM
CSIZ	Current Casing Size	8.625	IN
CWEI	Casing Weight	24.00	LB/F
DFD	Drilling Fluid Density	9.40	LB/G
DORL	Depth Offset for Repeat Analysis	0.0	FT
MST	Mud Sample Temperature	77.11	DEGF
RMFS	Resistivity of Mud Filtrate Sample	0.6053	OHMM
TD	Total Depth	4160	FT

Format: PORO_REP Vertical Scale: 5" per 100' Graphics File Created: 10-Jan-2011 22:32

OP System Version: 18C0-147

HAIT-H	SRPC-4042-Q3_2010_OP18	HILTB-FTB	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTC-H	18C0-147		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_005PUP	FN:4	PRODUCER	10-Jan-2011 22:31	4179.0 FT	3842.0 FT
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Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	10-Jan-2011 22:32
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Company: **McElvain Oil & Gas, Inc**

Schlumberger

Well: **Hemmert 24-9 #1**

Field: **Mong**

County: **Trego**

State: **Kansas**

Platform Express
Compensated Neutron
Litho Density

Schlumberger

Company: **McElvain Oil & Gas, Inc**

Well: **Hemmert 24-9 #1**

Field: **Mong**

County: **Trego**

State: **Kansas**

**Platform Express
Array Induction
with Linear Correlation**

County: Trego
Field: Mong
Location: Sec. 24, T11S, R23W
Well: Hemmert 24-9 #1
Company: McElvain Oil & Gas, Inc

LOCATION		Elev.:	K.B.	2364.00 ft
Sec. 24, T11S, R23W			G.L.	2359.00 ft
SHL: 1480' FSL X 680' FWL NESE			D.F.	2363.00 ft
Lat/Long:				
Permanent Datum:	Ground Level	Elev.: 2359.00 ft		
Log Measured From:	Kelly Bushing	5.00 ft above Perm. Datum		
Drilling Measured From:	Kelly Bushing			
API Serial No.	Section	Township	Range	
15-195-22693-000C	24	11S	23W	

Logging Date	Run 1	Run 2	Run
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth			
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
Density			
Fluid Loss			
Source Of Sample			
RM @ Measured Temperature			
RMF @ Measured Temperature			
RMC @ Measured Temperature			
Source RMF			
RM @ MRT			
Maximum Recorded Temperatures			
Circulation Stopped			
Logger On Bottom			
Unit Number			
Recorded By			
Witnessed By			

Logging Date	10-Jan-2011		
Run Number	1		
Depth Driller	4160 ft		
Schlumberger Depth	4160 ft		
Bottom Log Interval	4152 ft		
Top Log Interval	267 ft		
Casing Driller Size @ Depth	8.625 in @ 267 ft		
Casing Schlumberger	267 ft		
Bit Size	7.875 in		
Type Fluid In Hole	Water Based Mud		
Density	9.4 lbm/gal	56 s	
Fluid Loss	PH	8	
Source Of Sample	AIT Sensor		
RM @ Measured Temperature	0.807 ohm.m	@	77 degF
RMF @ Measured Temperature	0.605 ohm.m	@	77 degF
RMC @ Measured Temperature	1.211 ohm.m	@	77 degF
Source RMF	Calculated	Calculated	
RM @ MRT	0.603 @ 106	0.452 @ 106	
Maximum Recorded Temperatures	106 degF		
Circulation Stopped	10-Jan-2011	20:15	
Logger On Bottom	10-Jan-2011	22:35	
Unit Number	3021	Fort Morgan	
Recorded By	Phillip Grant		
Witnessed By	Richard Ball		

DEPTH SUMMARY LISTING

Date Created: 10-JAN-2011 23:32:04

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 3713 Calibration Date: 13-Sep-2009 Calibrator Serial Number: 33 Calibration Cable Type: 7-39P LXS Wheel Correction 1: -7 Wheel Correction 2: -5	Type: CMTD-B/A Serial Number: 2787 Calibration Date: 8-DEC-2010 Calibrator Serial Number: 100513 Number of Calibration Points: 10 Calibration RMS: 26 Calibration Peak Error: 40	Type: 7-39P LXS Serial Number: 6171 Length: 14600 FT Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence: First Log In the Well
Rig Up Length At Surface: 0.00 FT
Rig Up Length At Bottom: 0.00 FT
Rig Up Length Correction: 0.00 FT
Stretch Correction: 2.00 FT
Tool Zero Check At Surface: 0.00 FT

Depth Control Remarks

<ol style="list-style-type: none"> 1. All Schlumberger depth policy procedures applied 2. This is the primary depth reference 3. 4. 5. 6.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1	OTHER SERVICES2
OS1: FMI-Sonic Scanner	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
This is the first run in hole.	
Tool run as per tool sketch.	
Data may be affected by hole rugosity	
Matrix: Limestone 2.71	

Anhydrite zone: 1810'-1885' and 2180'-2272'

Crew: Ian Derry, Tim Ludgate

Rig: W-W Drilling 11

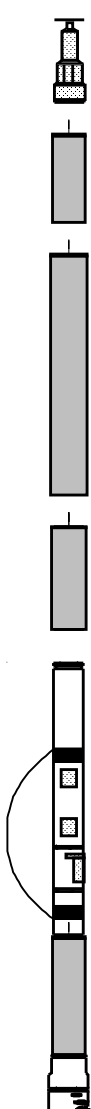
RUN 1			RUN 2		
SERVICE ORDER #:		BE0K-00118	SERVICE ORDER #:		
PROGRAM VERSION:		18C0-147	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1 RUN 2

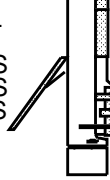
SURFACE EQUIPMENT
 GSR-U/Y
 NCT-B
 CNB-AB
 NCS-VB
 GSR-U
 WITM (DTS)-A

DOWNHOLE EQUIPMENT

<p>LEH-QT LEH-QT</p> <p>DTC-H ECH-KC DTCH0-A DTCH1-A</p> <p>HNGS-BA HNGS-BA 169 HNSH-BA 169</p> <p>HNGC-B HNGH-A 292 HNGC-B 292</p> <p>HILTB-FTB HGNSD-B HMCA HGNH NLS-KL NSR-F 5168 HACCZ 749 HCNT HGR HRCC-B HRMS-B HRGD-B GLS-VJ 5363 MCFL Device HILT Nucl. LS 42767 HILT Nucl. SS 42767 HILT Nucl. BS 42767 BOW-SPR NPV-N</p>	<p>CTEM</p> <p>TelStatus ToolStatu</p> <p>Upper_1 Lower_2</p> <p>HNGC Stat</p> <p>HGNS HTEM HMCA HGNS Gamm</p> <p>HGNS Neut HGNS Neut</p> <p>HGNS sens</p> <p>HRCC cart</p>		<p>55.3</p> <p>51.4</p> <p>49.3</p> <p>49.3</p> <p>47.1</p> <p>46.4</p> <p>39.4</p> <p>37.6</p> <p>36.9</p> <p>31.1</p> <p>30.6</p> <p>28.2</p> <p>24.2</p>	<p>52.3</p> <p>37.6</p> <p>37.6</p> <p>41.1</p>
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MCFL
 HILT cali
 HRDD-LS
 HRDD-SS
 HRDD-BS

18.8
 18.3
 17.9



HAIT-H
 AHIS-BA 216
 AHRM-A

16.0

Induction
 Temperatu
 Power Sup

7.9

SP SENSOR
 DF
 HTEN HMAS HV
 Accelerom
 Mud Resis
 Tension

0.1

0.0

TOOL ZERO

MAXIMUM STRING DIAMETER 4.63 IN
 MEASUREMENTS RELATIVE TO TOOL ZERO
 ALL LENGTHS IN FEET

Production String	(in)		(ft)	Well Schematic	(ft)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
					0.0	8.625	8.097	Casing String
					267.0	8.625	8.097	Casing Shoe
					267.0	7.875		Borehole Segment

All Depths are Drillers

Schlumberger

RESISTIVITY LINEAR 2" = 100'

MAXIS Field Log

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	10-Jan-2011 22:32	4170.0 FT	215.5 FT
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Integrated Hole/Cement Volume Summary

Hole Volume = 1866.23 F3

Cement Volume = 1436.24 F3 (assuming 4.50 IN casing O.D.)

Computed from 4160.0 FT to 267.0 FT using data channel(s) HCAL

OP System Version: 18C0-147

HAIT-H	SRPC-4042-Q3_2010_OP18	HILTB-FTB	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTC-H	18C0-147		

PIP SUMMARY

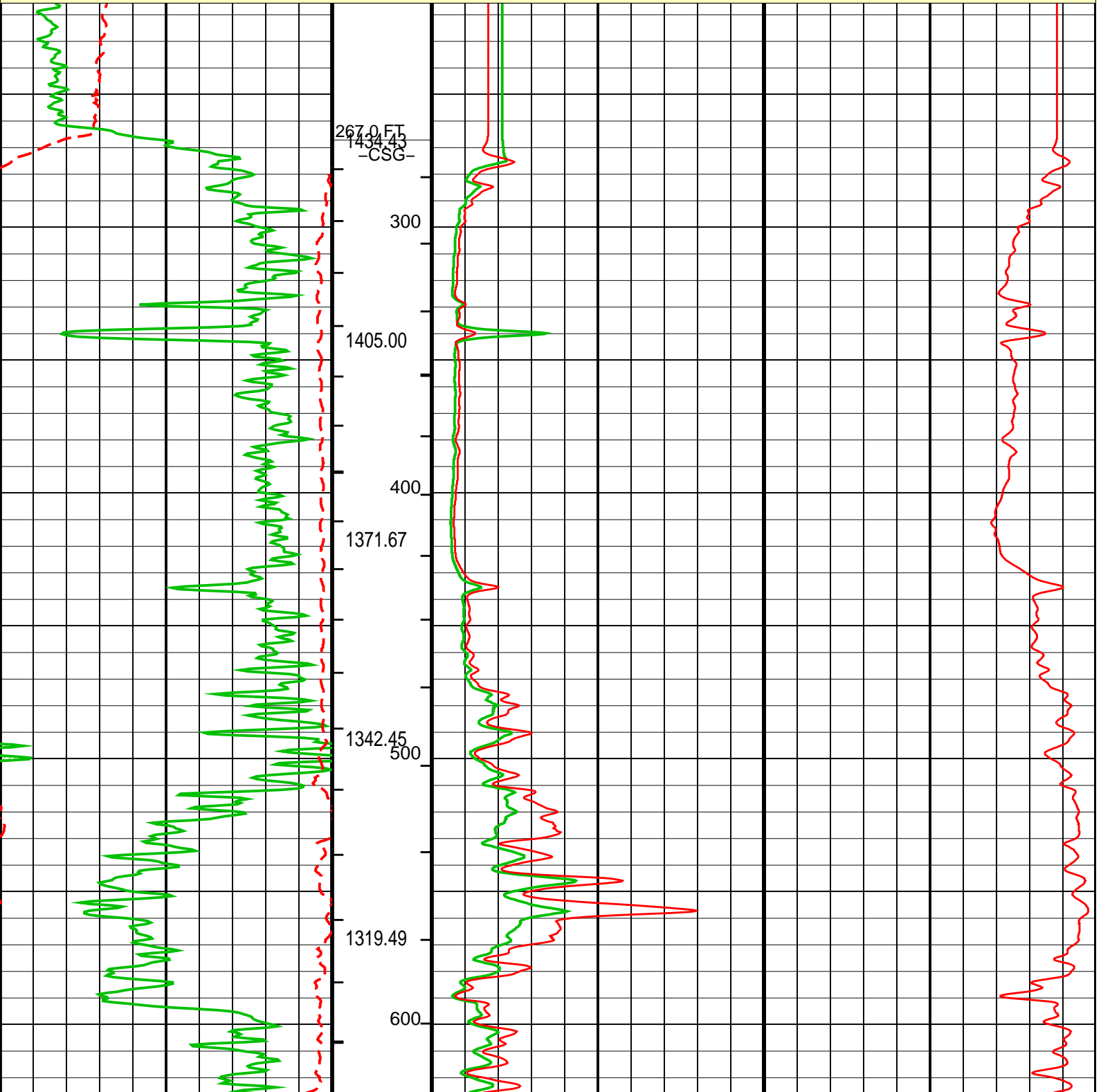
- └ Integrated Cement Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Hole Volume Minor Pip Every 10 F3

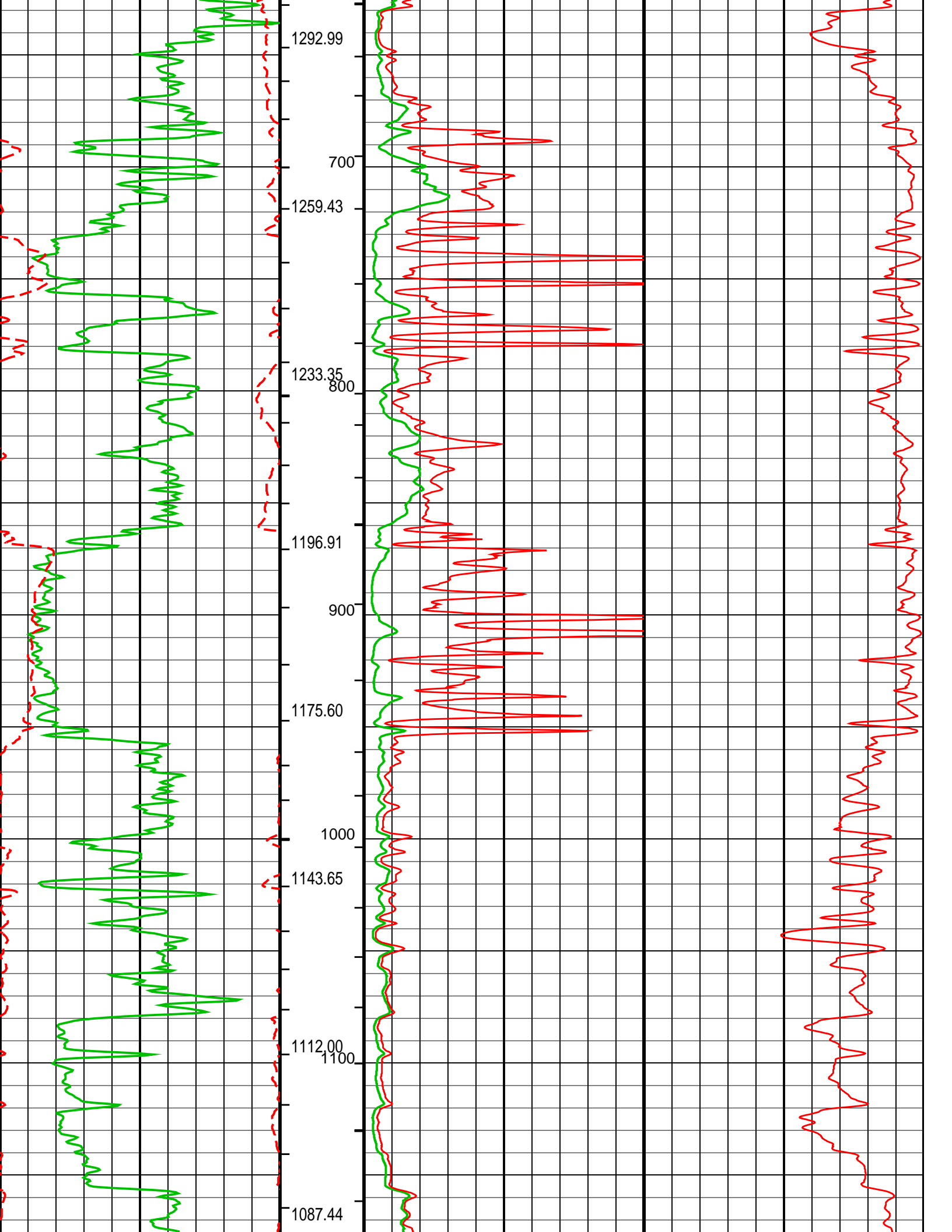
SP (SP) (MV)	-200	0
Gamma Ray (GR) (GAPI)	0	150
Gamma Ray Backup		

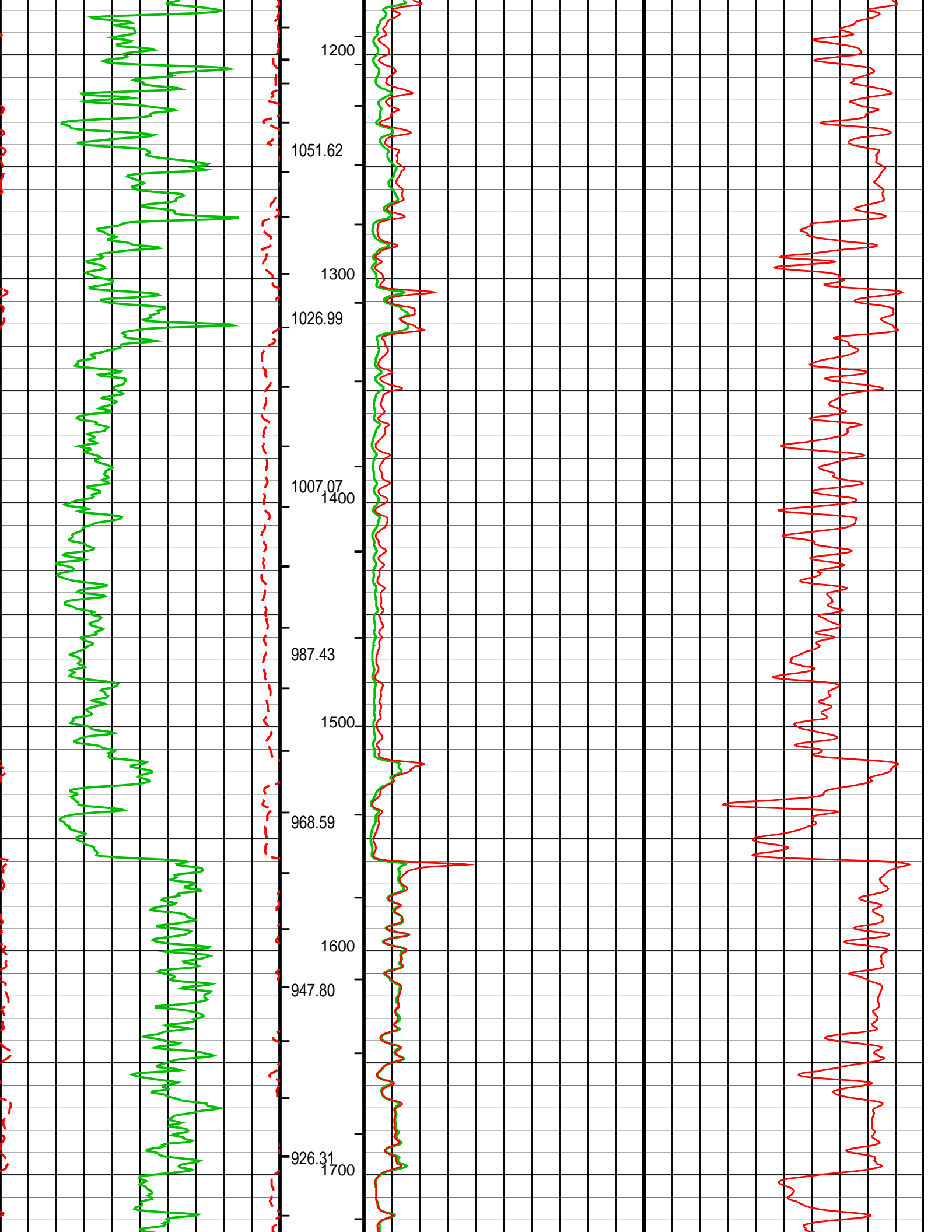
AIT-H 90 Inch Investigation (AHF90) (OHMM)	0	50
AIT-H 10 Inch Investigation (AHF10) (OHMM)	0	50

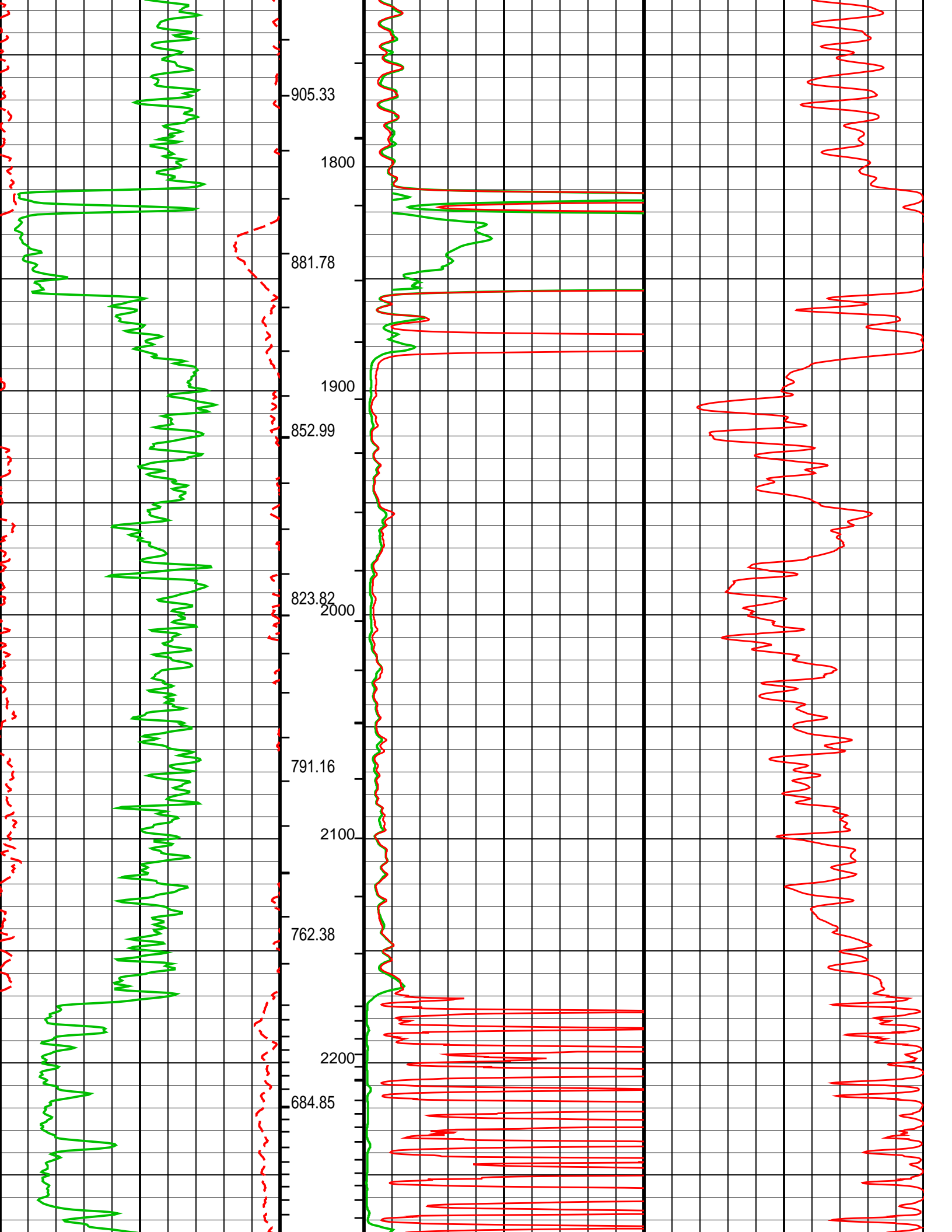
AIT-H 90 Inch Investigation Conductivity (AHFCO90) (MM/M)	1000	0
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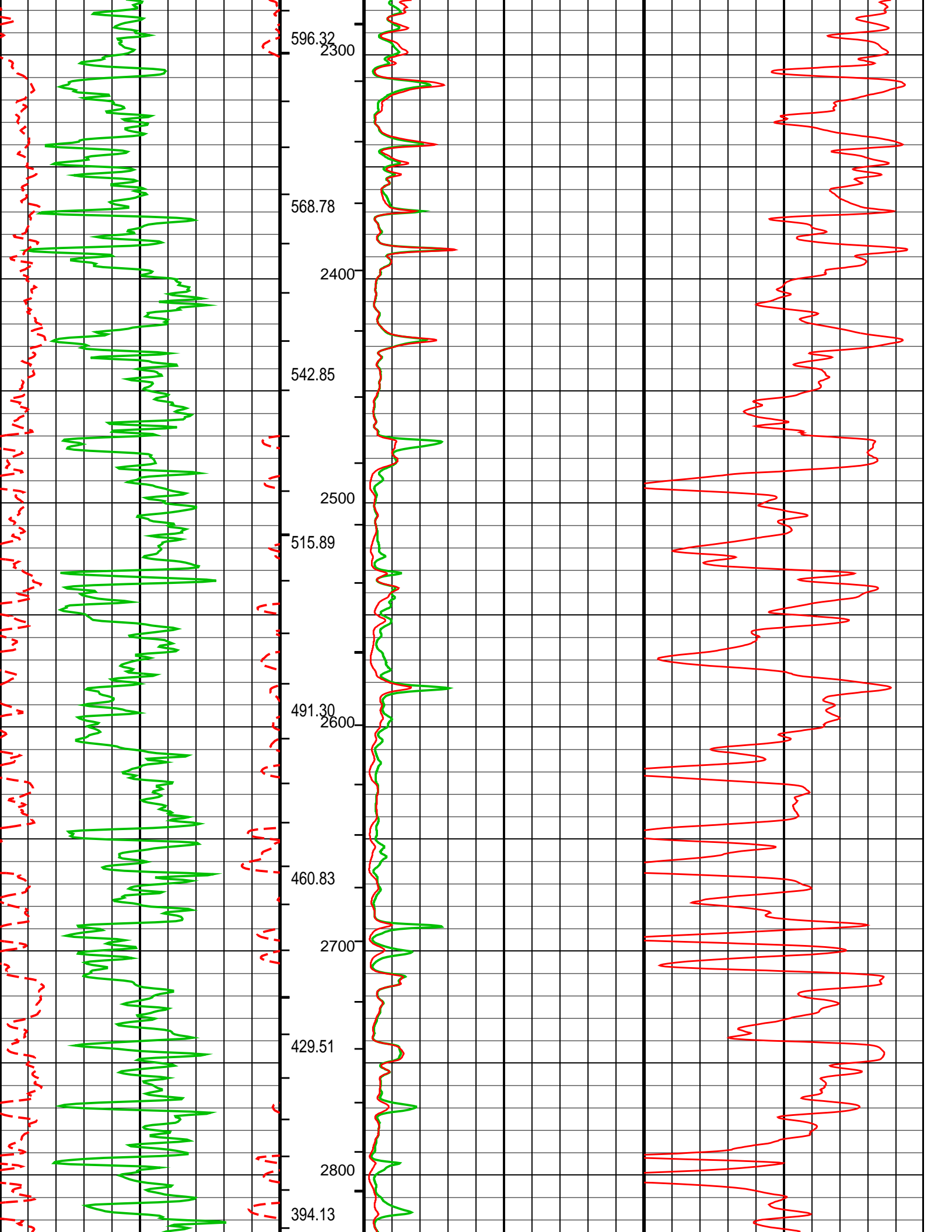
MAIN PASS: *** PLATFORM EXPRESS - ARRAY INDUCTION ***

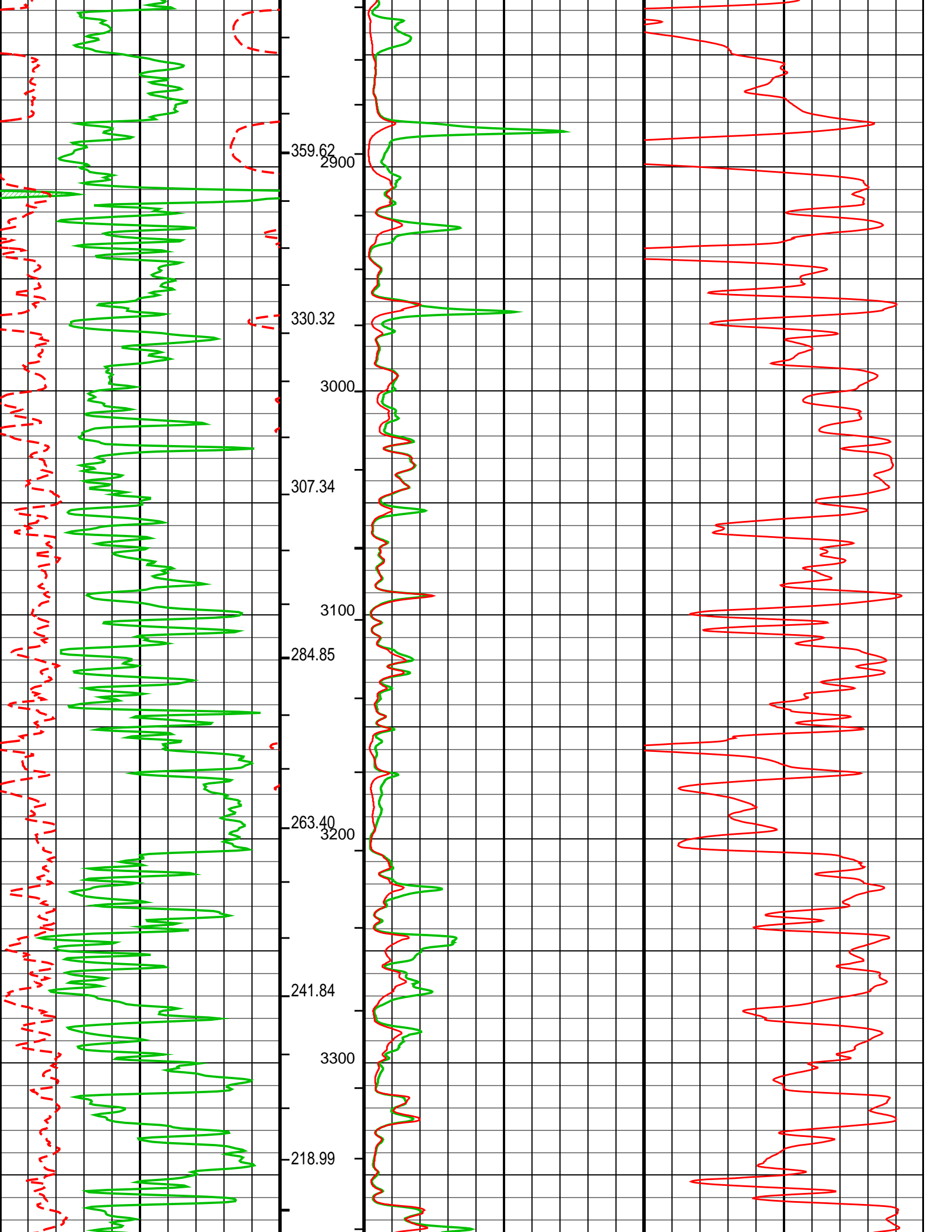


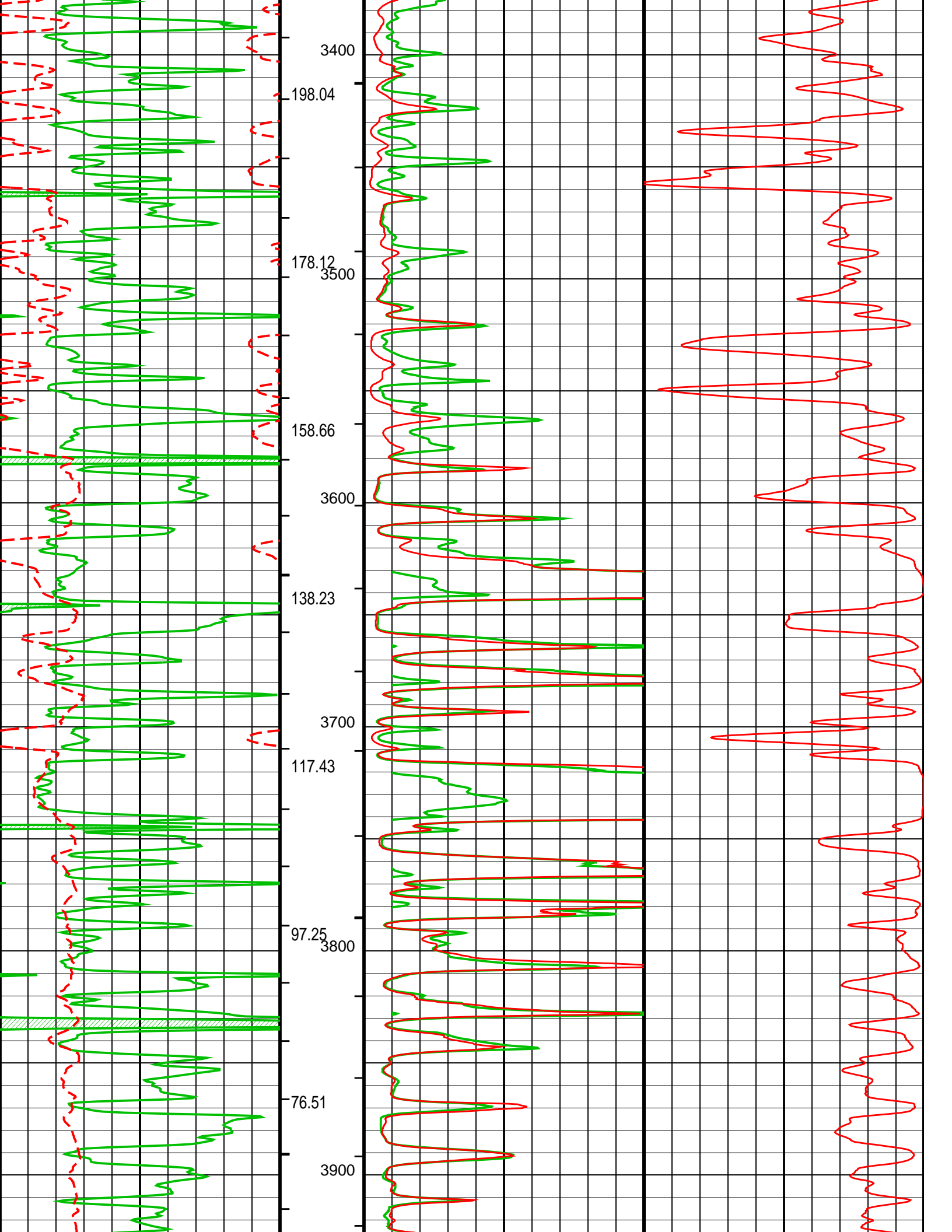


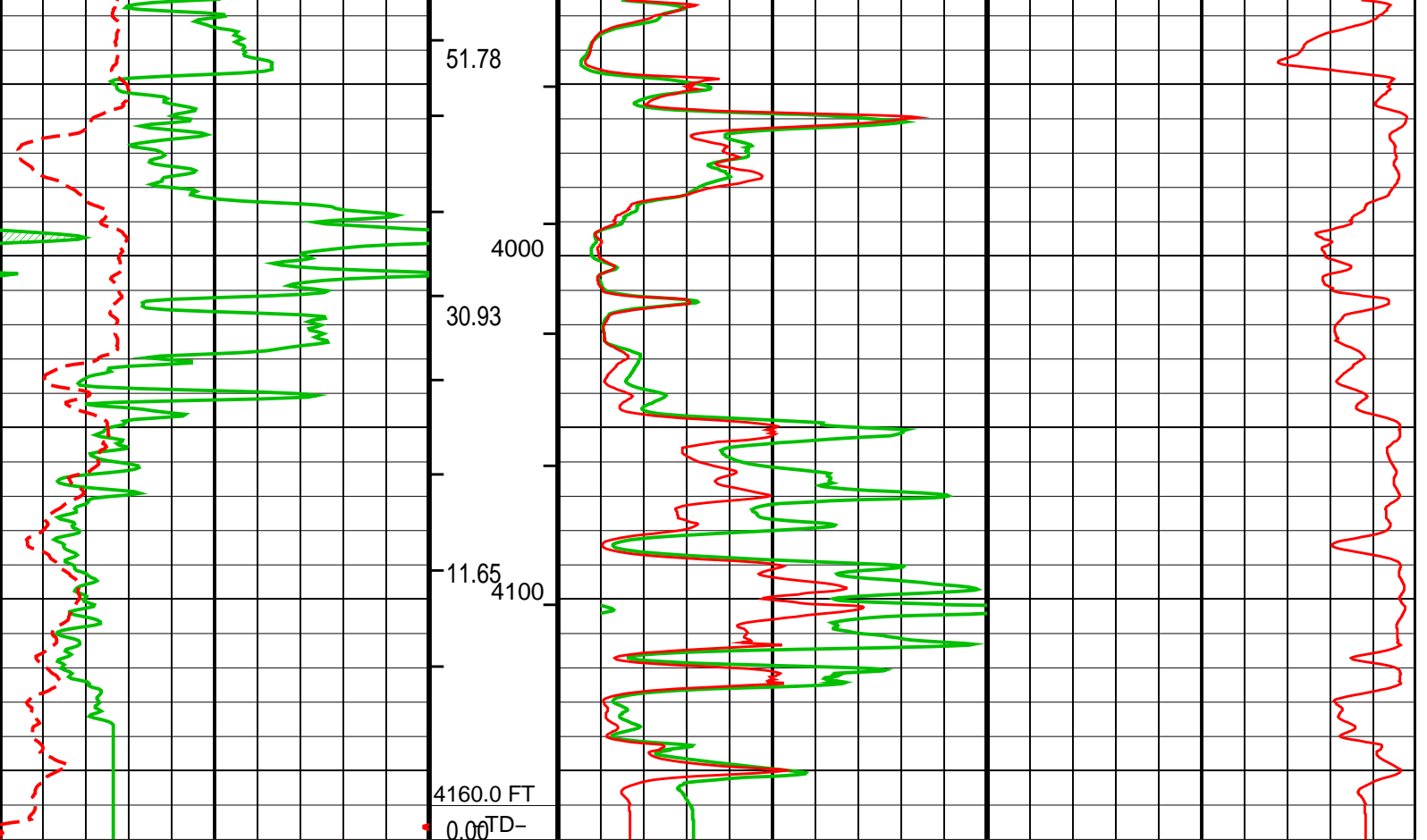












MAIN PASS: * PLATFORM EXPRESS – ARRAY INDUCTION *****

Gamma Ray Backup	Cement Volume (ICV) (F3)	AIT-H 10 Inch Investigation (AHF10)	AIT-H 90 Inch Investigation Conductivity (AHFCO90)
0		50	1000
(GAPI)		(OHMM)	(MM/M)
0	AIT-H 90 Inch Investigation (AHF90)	0	50
150		(OHMM)	(OHMM)
-200		0	
SP (SP)		(MV)	

PIP SUMMARY

- └ Integrated Cement Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Hole Volume Minor Pip Every 10 F3

Parameters

DLIS Name	Description	Value
HAIT-H: Array Induction Tool – H		
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff
AHBHV	Array Induction Borehole Correction Code Version Number	900
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
AHBLV	Array Induction Basic Logs Code Version Number	223
AHCDE	Array Induction Casing Detection Enable	Yes
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
AHFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20
AHMRF	Array Induction Mud Resistivity Factor	1
AHORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20
AHRFV	Array Induction Radial Profiling Code Version Number	701
AHRPV	Array Induction Radial Parametrization Code Version Number	232
AHSTA	Array Induction Tool Standoff	0.125 IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20
BHT	Bottom Hole Temperature (used in calculations)	105.555 DEG F
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DE/F

GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
HILTB-FTB: High resolution Integrated Logging Tool-DTS			
BHT	Bottom Hole Temperature (used in calculations)	105.555	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BHT	Bottom Hole Temperature (used in calculations)	105.555	DEGF
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	105.555	DEGF
FCD	Future Casing (Outer) Diameter	4.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
SHT	Surface Hole Temperature	68	DEGF
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
PERT: Preliminary Evaluation - Real Time			
BHT	Bottom Hole Temperature (used in calculations)	105.555	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	9.40	LB/G
DORL	Depth Offset for Repeat Analysis	0.0	FT
FLEV	Fluid Level	-50000.00	FT
MST	Mud Sample Temperature	77.11	DEGF
TD	Total Depth	4160	FT

Format: ERES_S2 Vertical Scale: 2" per 100'

Graphics File Created: 10-Jan-2011 22:32

OP System Version: 18C0-147

HAIT-H	SRPC-4042-Q3_2010_OP18	HILTB-FTB	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTC-H	18C0-147		

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	10-Jan-2011 22:32
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Schlumberger

MAIN RESISTIVITY LOG 5" = 100'

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_007LUP FN:6 PRODUCER 10-Jan-2011 22:32 4170.0 FT 215.5 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 330.19 ft³
 Cement Volume = 234.72 ft³ (assuming 4.50 in casing O.D.)
 Computed from 4159.5 ft to 3295.5 ft

OP System Version: 18C0-147

HAIT	SRPC-4042-Q3_2010_OP18	HILTD	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTCH	18C0-147		

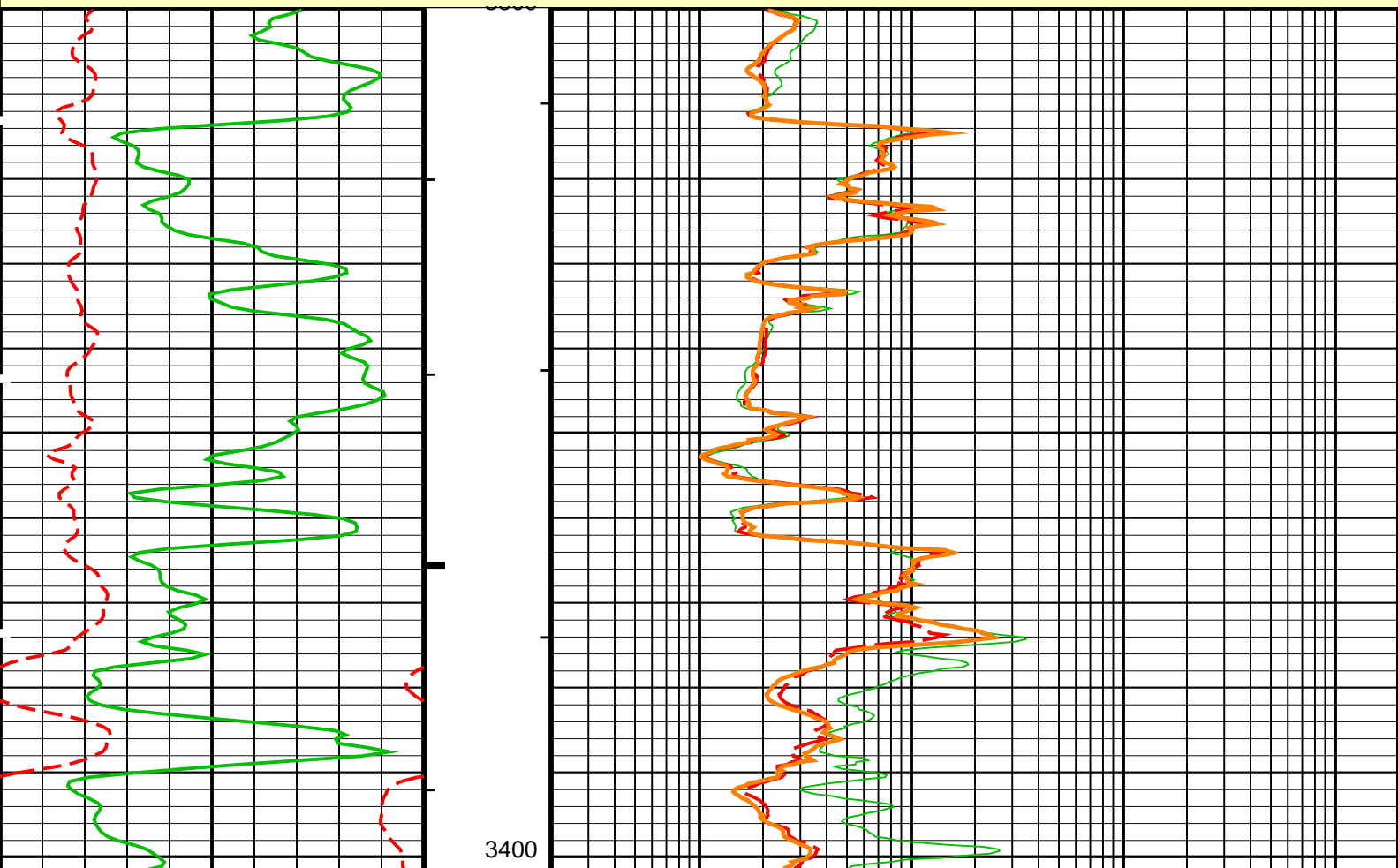
PIP SUMMARY

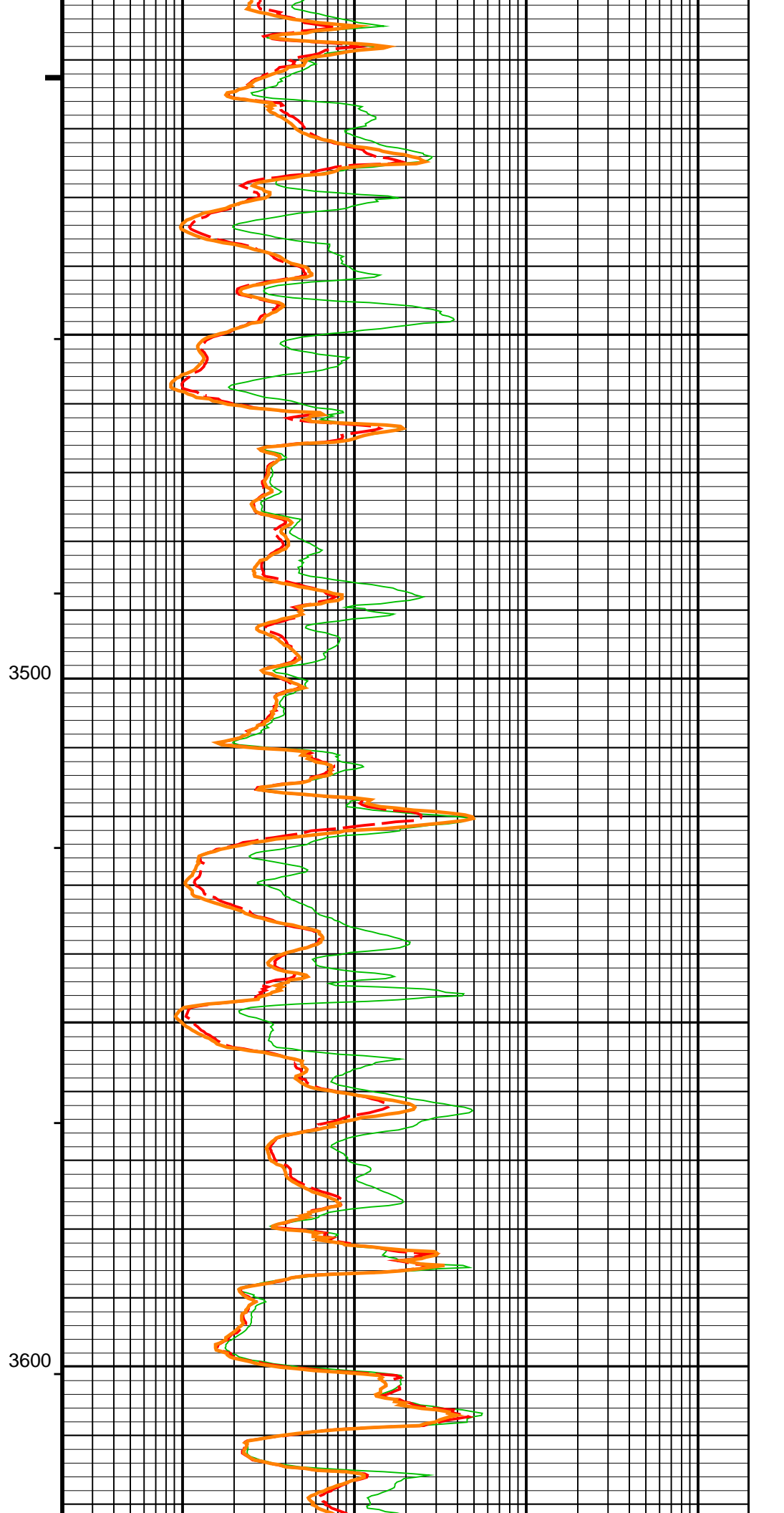
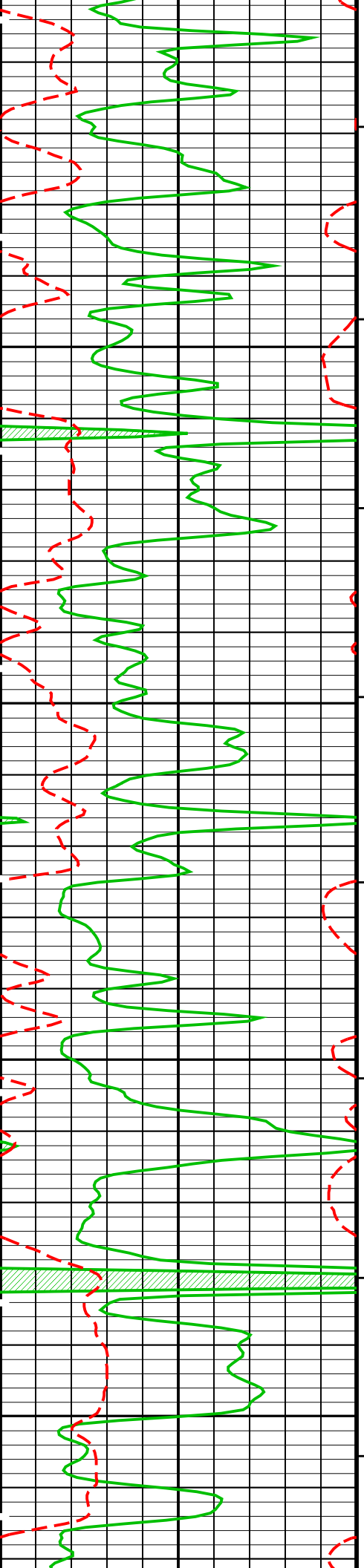
- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

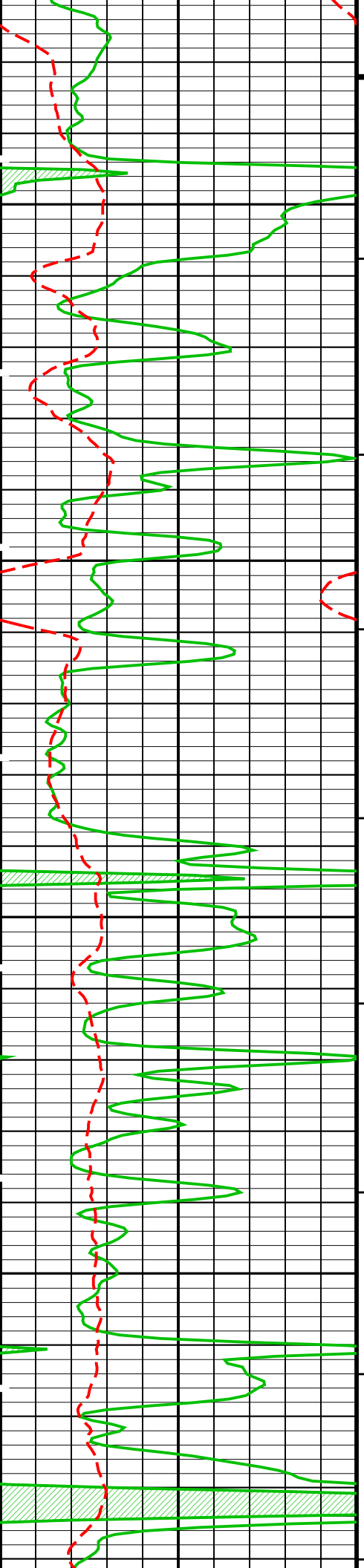
Time Mark Every 60 S

SP (SP) (MV)	0	Stuck Stretch (STIT)	AIT-H 90 Inch Investigation (AHT90) (OHMM)	2000
	-200	0 (F) 50	0.2	
Gamma Ray (GR) (GAPI)	0	Tool/Tot. Drag	AIT-H 60 Inch Investigation (AHT60) (OHMM)	2000
	150	Cable Drag	AIT-H 10 Inch Investigation (AHT10) (OHMM)	2000
Gamma Ray Backup			0.2	

MAIN PASS: *** PLATFORM EXPRESS - ARRAY INDUCTION ***

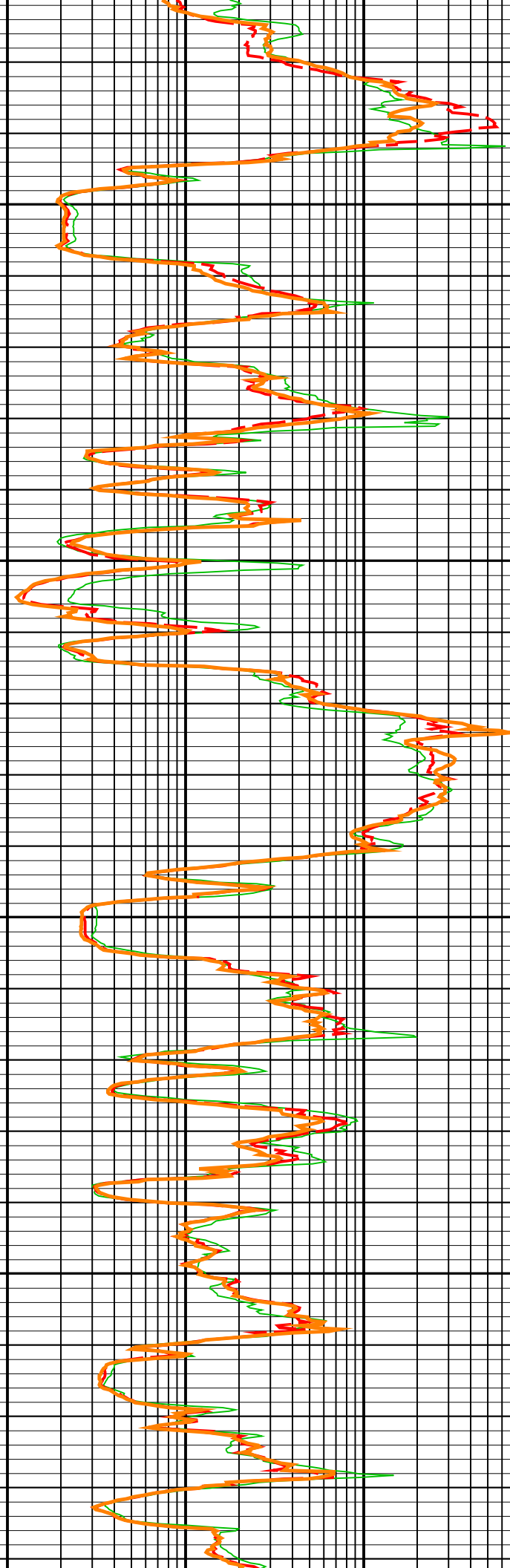


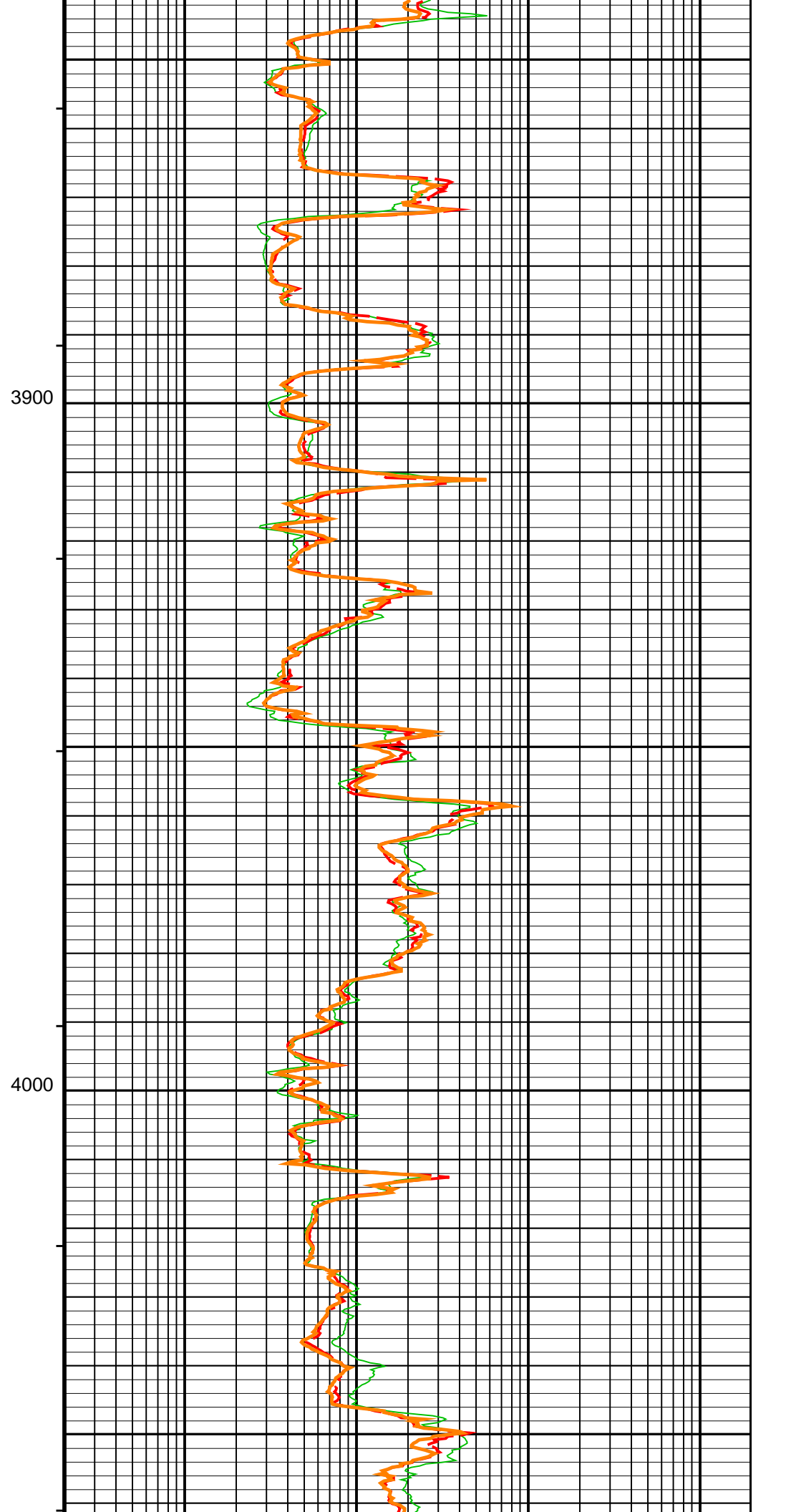
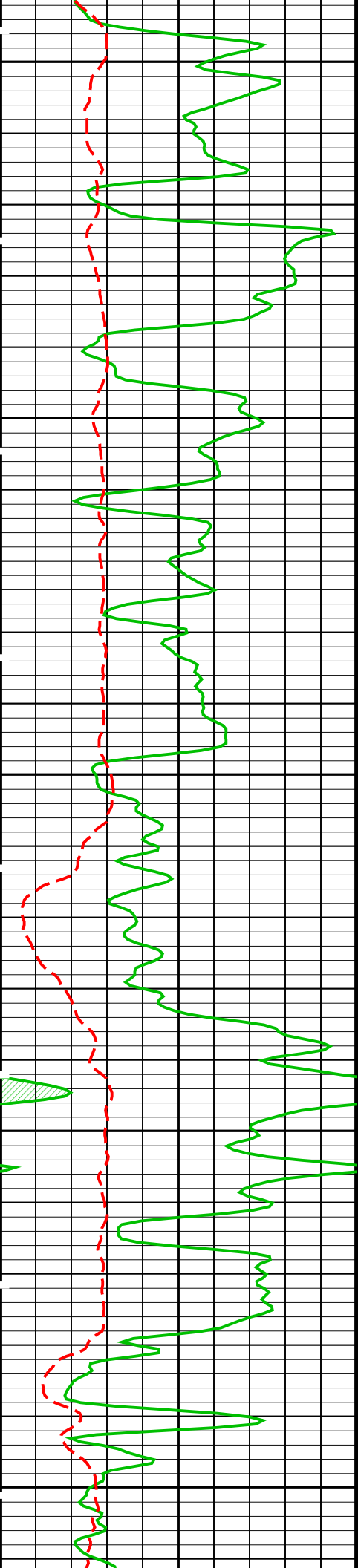


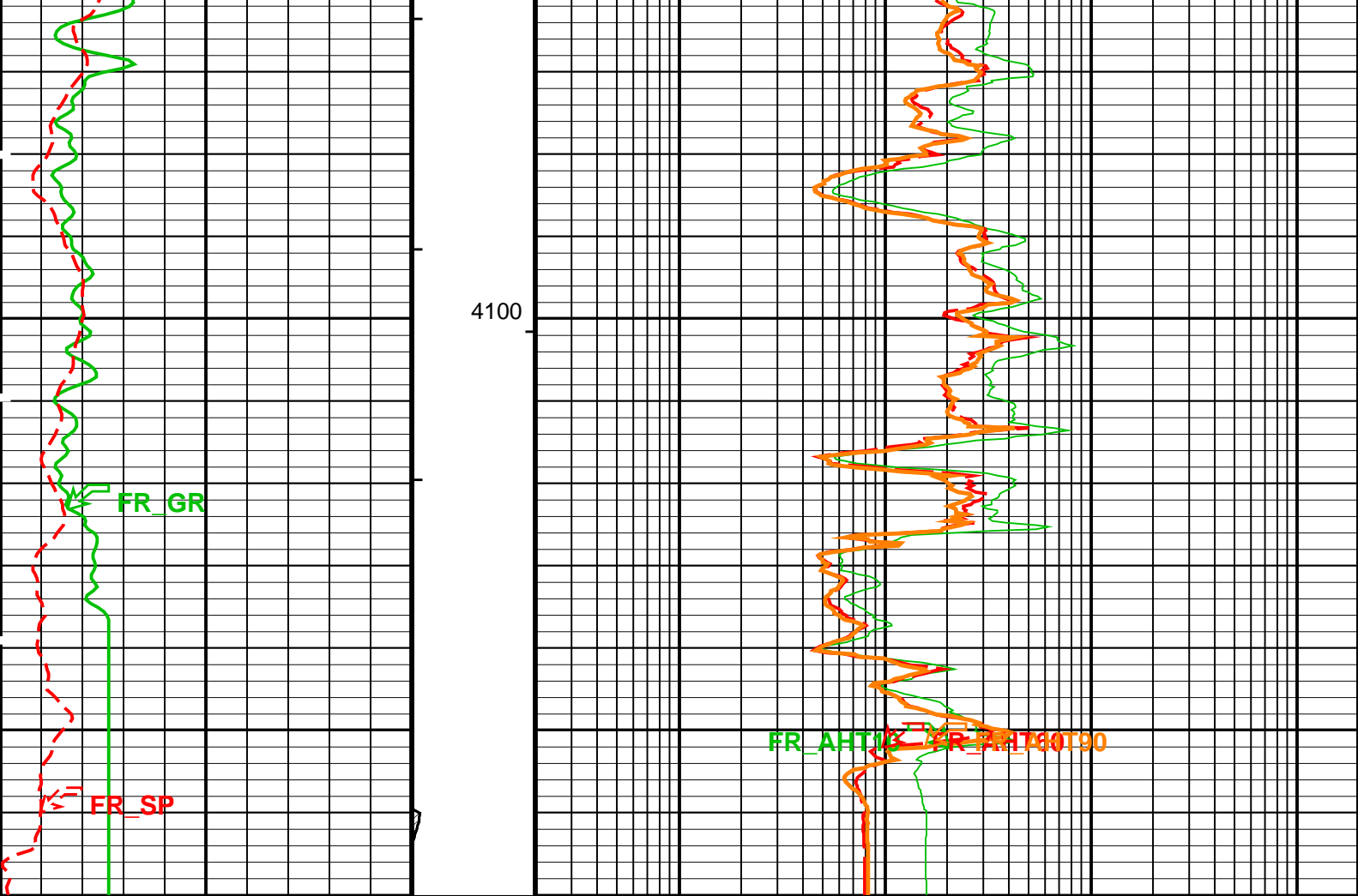


3700

3800







MAIN PASS: * PLATFORM EXPRESS – ARRAY INDUCTION *****

Gamma Ray Backup	Cable Drag	0.2	AIT-H 10 Inch Investigation (AHT10)	2000
Gamma Ray (GR) (GAPI)	Tool/Tot. Drag	0.2	AIT-H 60 Inch Investigation (AHT60)	2000
SP (SP) (MV)	Stuck Stretch (STIT)	0.2	AIT-H 90 Inch Investigation (AHT90)	2000
0	0 (F) 50			

PIP SUMMARY

- ┌ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- ┌ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HAIT-H: Array Induction Tool – H		
AHBHM	Array Induction Borehole Correction Mode	2_COMPUTESTANDOFF
AHBHV	Array Induction Borehole Correction Code Version Number	900
AHBLM	Array Induction Basic Logs Mode	6_ONE_TWO_AND_FOUR
AHBLV	Array Induction Basic Logs Code Version Number	223
AHCDE	Array Induction Casing Detection Enable	YES
AHCEN	Array Induction Tool Centering Flag (in Borehole)	ECCENTERED
AHFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20
AHMRF	Array Induction Mud Resistivity Factor	1.000
AHORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20
AHRFV	Array Induction Radial Profiling Code Version Number	701
AHRPV	Array Induction Radial Parametrization Code Version Number	232
AHSAP	Array Induction Suspend Answer Product Processing	0_NOSUSPENSION

AHSTA	Array Induction Tool Standoff	0.125	in
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
BHT	Bottom Hole Temperature (used in calculations)	105.6	degF
FEXP	Form Factor Exponent	2.000	
FNUM	Form Factor Numerator	1.000	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
GRSE	Generalized Mud Resistivity Selection	AHMF	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68.000	degF
SPDR	SP Drift	0.000	mV/ft
SPNV	SP Next Value	0.000	mV
HILTB-FTB: High resolution Integrated Logging Tool-DTS			
BHT	Bottom Hole Temperature (used in calculations)	105.6	degF
FEXP	Form Factor Exponent	2.000	
FNUM	Form Factor Numerator	1.000	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
GRSE	Generalized Mud Resistivity Selection	AHMF	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68.000	degF
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BHT	Bottom Hole Temperature (used in calculations)	105.6	degF
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
GRSE	Generalized Mud Resistivity Selection	AHMF	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68.000	degF
STI: Stuck Tool Indicator			
STKT	STI Stuck Threshold	2.500	ft
TDD	Total Depth - Driller	4160.0	ft
TDL	Total Depth - Logger	4160.0	ft
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	105.6	degF
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
GRSE	Generalized Mud Resistivity Selection	AHMF	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68.000	degF
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2.000	
FNUM	Form Factor Numerator	1.000	
PERT: Preliminary Evaluation - Real Time			
BHT	Bottom Hole Temperature (used in calculations)	105.6	degF
FEXP	Form Factor Exponent	2.000	
FNUM	Form Factor Numerator	1.000	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
GRSE	Generalized Mud Resistivity Selection	AHMF	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68.000	degF
System and Miscellaneous			
BS	Bit Size	7.875	in
DFD	Drilling Fluid Density	9.400	lbm/gal
FLEV	Fluid Level		
MST	Mud Sample Temperature	77.105	degF
TD	Total Depth	4160.0	ft

Format: GRES Vertical Scale: 5" per 100' Graphics File Created: 11-Jan-2011 01:12

OP System Version: 18C0-147

HAIT	SRPC-4042-Q3_2010_OP18	HILTD	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTCH	18C0-147		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	10-Jan-2011 22:32	4170.0 FT	215.5 FT
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REPEAT ANALYSIS

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_005PUP FN:4 PRODUCER 10-Jan-2011 22:31 4179.0 FT 3842.0 FT

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_007LUP FN:6 PRODUCER 10-Jan-2011 22:32

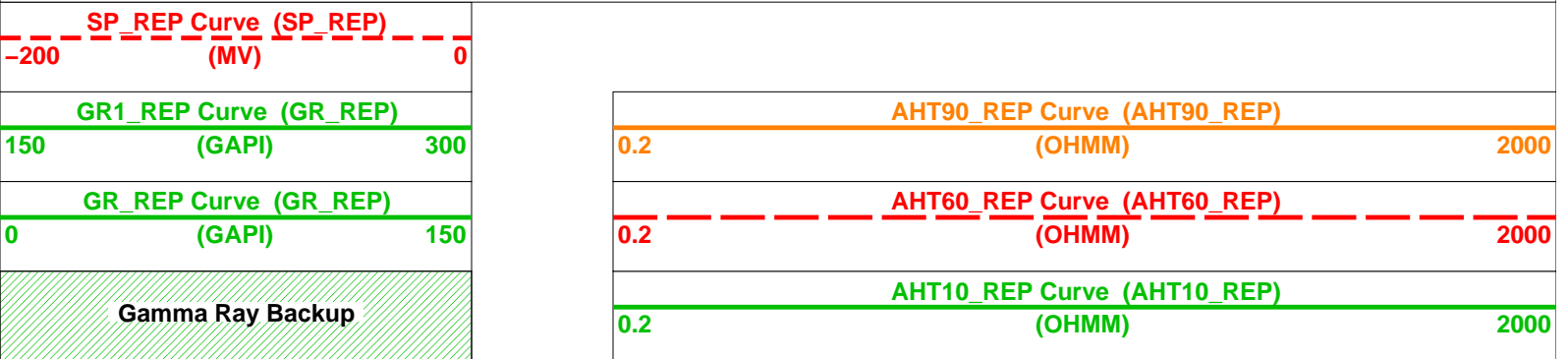
OP System Version: 18C0-147

HAIT-H SRPC-4042-Q3_2010_OP18 HILTB-FTB SRPC-4042-Q3_2010_OP18
 HNGC-B HFE-4001-OP18-NUCL HNGS-BA HFE-4001-OP18-NUCL
 DTC-H 18C0-147

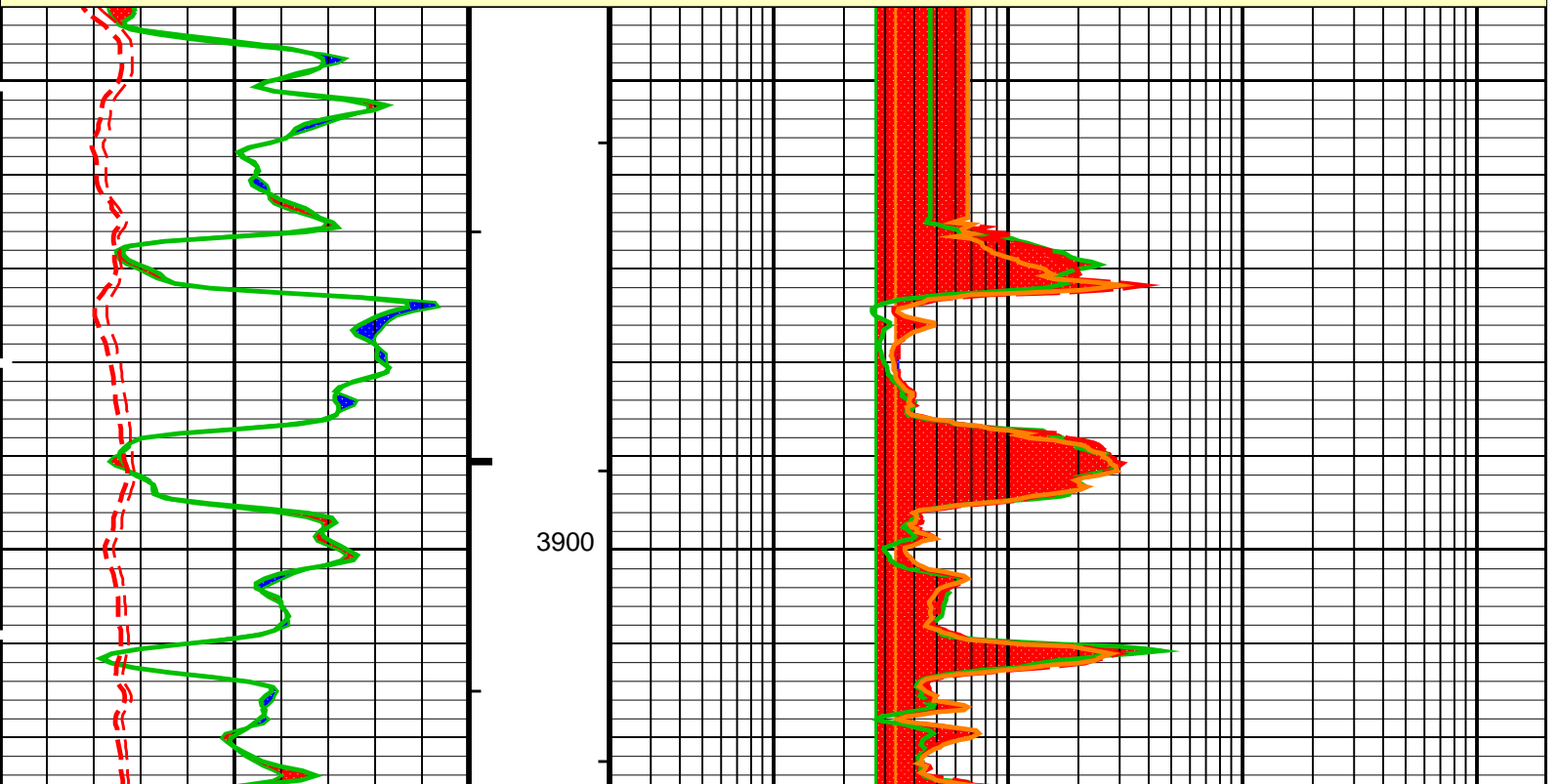
PIP SUMMARY

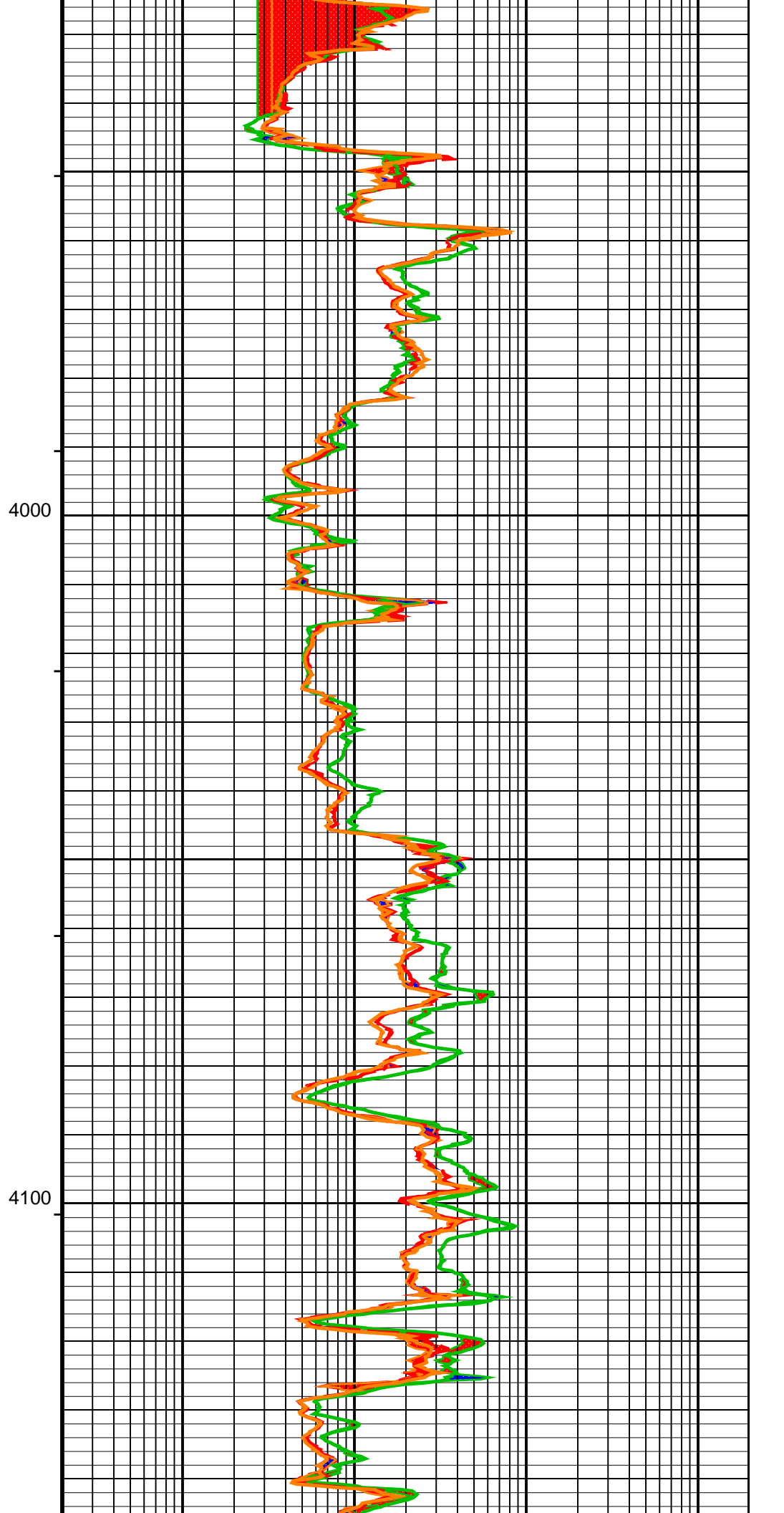
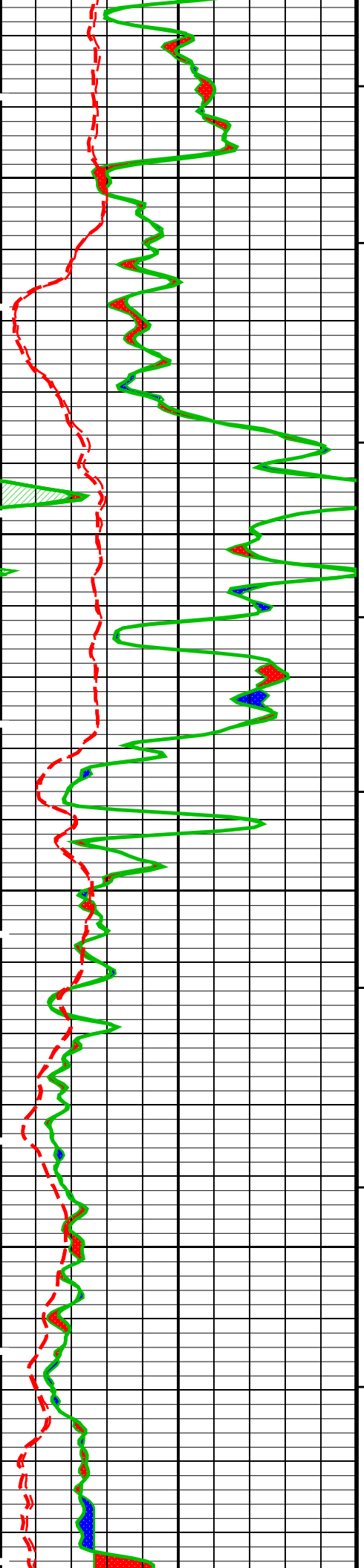
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- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

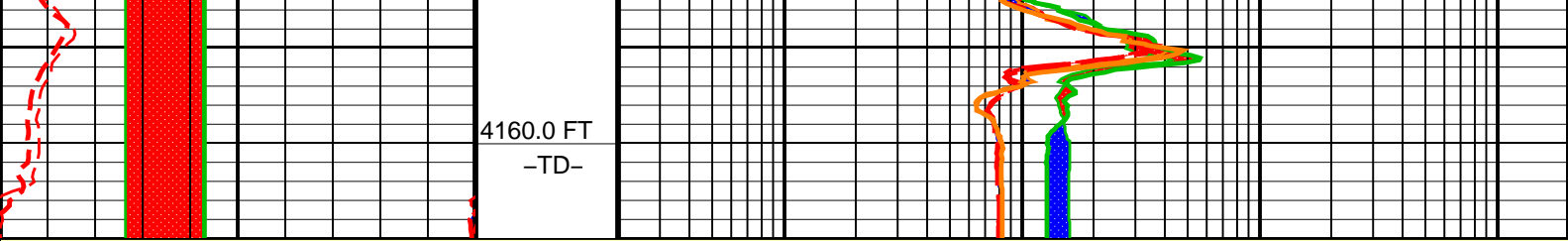
Time Mark Every 60 S



MAIN PASS: *** PLATFORM EXPRESS - ARRAY INDUCTION ***







MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***

Gamma Ray Backup	AHT10_REP Curve (AHT10_REP)	
	0.2	2000
	(OHMM)	
GR_REP Curve (GR_REP)	AHT60_REP Curve (AHT60_REP)	
0	0.2	2000
(GAPI)	(OHMM)	
150	AHT90_REP Curve (AHT90_REP)	
(GAPI)	0.2	2000
300	(OHMM)	
SP_REP Curve (SP_REP)		
-200		
(MV)		
0		

PIP SUMMARY

- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

AIT-H Answer Product Processing Summary. Data taken with Tool # 216 (AHTNO)

...Acquired data from HILT/HAIT

**** Borehole Correction ****

Effective Tool Standoff computed. Borehole diameter and mud res. taken as input (see GCSE and GRSE parameters)
 Tool is run in ECCENTERED mode with a tool stand-off of 0.13 IN. Bit Size is 7.88 IN.

**** Input Selections to AIT-H Answer Product Processing ****

Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF Temperature (GTSE): HTEM Porosity (FPHI): DPHZ

**** Other Parameters used by AIT-H Answer Product Processing ****

Form Factor Exponent (FEXP) 2.000 Form Factor Numerator (FNUM) 1.000
 Mud Filtrate Sample Resistivity (RMFS) 0.605 OHMM Mud Filtrate Sample Temperature (MFST) 77.105 DEGF
 Resistivity Connate Water (RW) 1.000 OHMM

**** AIT-H Answer Product Processing Control Parameters ****

Playback Mode: NORMAL

Parameters

DLIS Name	Description	Value
HAIT-H: Array Induction Tool - H		
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff
AHBHV	Array Induction Borehole Correction Code Version Number	900
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
AHBLV	Array Induction Basic Logs Code Version Number	223
AHCDE	Array Induction Casing Detection Enable	Yes
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
AHFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20
AHMRF	Array Induction Mud Resistivity Factor	1
AHORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20
AHRFV	Array Induction Radial Profiling Code Version Number	701
AHRPV	Array Induction Radial Parametrization Code Version Number	232
AHSTA	Array Induction Tool Standoff	0.125 IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20
BHT	Bottom Hole Temperature (used in calculations)	105.555 DEGF
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST

GTSE	Generalized Temperature Selection	HSTS_HTEM	68	DEGF
SHT	Surface Hole Temperature		0	MV
SPNV	SP Next Value			
HILTB-FTB: High resolution Integrated Logging Tool-DTS				
BHT	Bottom Hole Temperature (used in calculations)		105.555	DEGF
FEXP	Form Factor Exponent		2	
FNUM	Form Factor Numerator		1	
GCSE	Generalized Caliper Selection	HCAL		
GDEV	Average Angular Deviation of Borehole from Normal		0	DEG
GGRD	Geothermal Gradient		0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST		
GTSE	Generalized Temperature Selection	HSTS_HTEM		
SHT	Surface Hole Temperature		68	DEGF
HNGS-BA: Hostile Natural Gamma Ray Sonde				
BHT	Bottom Hole Temperature (used in calculations)		105.555	DEGF
GCSE	Generalized Caliper Selection	HCAL		
GDEV	Average Angular Deviation of Borehole from Normal		0	DEG
GGRD	Geothermal Gradient		0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST		
GTSE	Generalized Temperature Selection	HSTS_HTEM		
SHT	Surface Hole Temperature		68	DEGF
HOLEV: Integrated Hole/Cement Volume				
BHT	Bottom Hole Temperature (used in calculations)		105.555	DEGF
FCD	Future Casing (Outer) Diameter		4.5	IN
GCSE	Generalized Caliper Selection	HCAL		
GDEV	Average Angular Deviation of Borehole from Normal		0	DEG
GGRD	Geothermal Gradient		0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST		
GTSE	Generalized Temperature Selection	HSTS_HTEM		
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC		
SHT	Surface Hole Temperature		68	DEGF
FEQL: Formation Evaluation Quick Look				
FEXP	Form Factor Exponent		2	
FNUM	Form Factor Numerator		1	
PERT: Preliminary Evaluation - Real Time				
BHT	Bottom Hole Temperature (used in calculations)		105.555	DEGF
FEXP	Form Factor Exponent		2	
FNUM	Form Factor Numerator		1	
GCSE	Generalized Caliper Selection	HCAL		
GDEV	Average Angular Deviation of Borehole from Normal		0	DEG
GGRD	Geothermal Gradient		0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST		
GTSE	Generalized Temperature Selection	HSTS_HTEM		
SHT	Surface Hole Temperature		68	DEGF
System and Miscellaneous				
BS	Bit Size		7.875	IN
DFD	Drilling Fluid Density		9.40	LB/G
DORL	Depth Offset for Repeat Analysis		0.0	FT
FLEV	Fluid Level		-50000.00	FT
MST	Mud Sample Temperature		77.11	DEGF
TD	Total Depth		4160	FT

Format: GRES_REP Vertical Scale: 5" per 100'

Graphics File Created: 10-Jan-2011 22:32

OP System Version: 18C0-147

HAIT-H	SRPC-4042-Q3_2010_OP18	HILTB-FTB	SRPC-4042-Q3_2010_OP18
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTC-H	18C0-147		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_005PUP	FN:4	PRODUCER	10-Jan-2011 22:31	4179.0 FT	3842.0 FT
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Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	10-Jan-2011 22:32
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Company: **McElvain Oil & Gas, Inc**

Schlumberger

Well: **Hemmert 24-9 #1**

Field: **Mong**

County: **Trego**

State: **Kansas**

Platform Express
Array Induction
with Linear Correlation