MUD

County: VAN BUREN

Schlumberger

Company: **STORM CAT ENERGY (USA) OPERATING CORP**

Well: **FILES 1−12H**

Field: **B−43**

County: **VAN BUREN** State: **ARKANSAS**

Company: STORM CAT ENERGY (USA) OP
Well: FILES 1−12H
Location: SHL = 1007' FNL & 2306' FWL
Field: B−43

PLATFORM EXPRESS
ARRAY INDUCTION/ GAMMA RAY
LITHO−DENSITY/ COMPENSATED NEUTRON

LOCATION

SHL = 1007' FNL & 2306' FWL

Elev.: K.B. 1677 ft
G.L. 1655 ft
D.F. 1676 ft

Permanent Datum: GROUND LEVEL Elev.: 1655 ft
Log Measured From: KELLY BUSHING 22.0 ft above Perm. Datum
Drilling Measured From: KELLY BUSHING

API Serial No.	Section	Township	Range
03−141−10179	12	11N	17W

	Run 1	Run 2	Run 3
Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth	@	@	@
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
MUD Density / Viscosity			
MUD Fluid Loss / PH			
MUD Source Of Sample			
RM @ Measured Temperature	@	@	@
RMF @ Measured Temperature	@	@	@
RMC @ Measured Temperature	@	@	@
Source RMF / RMC			
RM @ MRT / RMF @ MRT	@ / @	@ / @	@ / @
Maximum Recorded Temperatures			
Circulation Stopped Time			
Logger On Bottom Time			
Unit Number / Location			
Recorded By			
Witnessed By			

Logging Date	28−Sep−2007		
Run Number	ONE		
Depth Driller	1859 ft		
Schlumberger Depth	1856 ft		
Bottom Log Interval	1848 ft		
Top Log Interval	200 ft		
Casing Driller Size @ Depth	9.625 in @ 560 ft	@	
Casing Schlumberger	559 ft		
Bit Size	8.750 in		
Type Fluid In Hole	FRESH WATER MUD		
MUD Density / Viscosity	9 lbm/gal / 60 s		
MUD Fluid Loss / PH	5 cm3 / 10		
MUD Source Of Sample	MUD PITS		
RM @ Measured Temperature	1.040 ohm.m @ 88 degF	@	
RMF @ Measured Temperature	0.885 ohm.m @ 88 degF	@	
RMC @ Measured Temperature	1.456 ohm.m @ 88 degF	@	
Source RMF / RMC	CALCULATED / CALCULATED		
RM @ MRT / RMF @ MRT	1.033 @ 89 / 0.879 @ 89	@ / @	
Maximum Recorded Temperatures	89 degF	89 / 88	
Circulation Stopped Time	28−Sep−2007	9:00	
Logger On Bottom Time	28−Sep−2007	13:58	
Unit Number / Location	7009 CONWAY, AR		
Recorded By	MATT WOLFE		
Witnessed By	TOM MAJORS/ MATT HUMPHREYS		

DEPTH SUMMARY LISTING

Date Created: 28−SEP−2007 14:50:40

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW−B	Type:	CMTD−B/A	Type:	7−42P−XS
Serial Number:	2808	Serial Number:	2832	Serial Number:	5042
Calibration Date:	17−MAY−2007	Calibration Date:	20−SEP−2007	Length:	13000.00 FT
Calibrator Serial Number:	1	Calibrator Serial Number:	1084		
Calibration Cable Type:	7−42P−XS	Calibration Gain:	0.92	Conveyance Method:	Wireline
Wheel Correction 1:	−2	Calibration Offset:	327.00	Rig Type:	LAND
Wheel Correction 2:	−5				

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	320.60 FT
Rig Up Length At Bottom:	320.40 FT
Rig Up Length Correction:	0.20 FT
Stretch Correction:	0.00 FT
Tool Zero Check At Surface:	0.10 FT

Depth Control Remarks

1.
2.
3.
4.
5.
6.

OTHER SERVICES1	OTHER SERVICES2
OS1: ARRAY INDUCTION	OS1:
OS2: LITHO−DENSITY	OS2:
OS3: COMPENSATED NEUTRON	OS3:
OS4: GAMMA RAY	OS4:
OS5: ECS/ FMI	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST RUN IN HOLE	
TOOL RUN AS PER TOOL SKETCH	
MATRIX: LIMESTONE 2.71 G/CC	
FLUID DENSITY: 1.0 G/CC	

NABORS RIG 113

YOUR CREW TODAY: JAMES, TRAVAS, MARCUS

THANK YOU FOR USING SCHLUMBERGER

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:		15C0−309	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

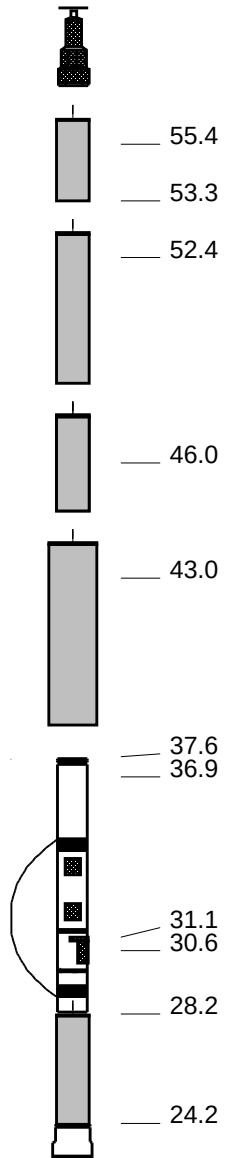
EQUIPMENT DESCRIPTION

RUN 1 RUN 2

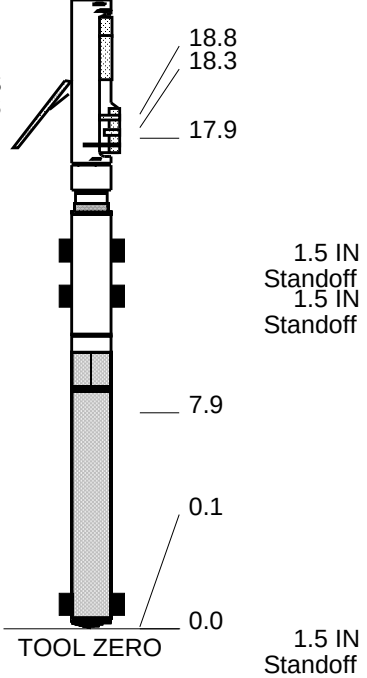
SURFACE EQUIPMENT

GSR−U/Y
NCT−B
CNB−AB
NCS−VB
WITM (DTS)−A

DOWNHOLE EQUIPMENT



AIT−H
AHIS−BA 303
AHRM−A
BOW−SPR
NPV−N



MAXIMUM STRING DIAMETER 6.88 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_011LUP	FN:10	PRODUCER	28−Sep−2007 13:58	1866.0 FT	200.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_013PUP	FN:12	PRODUCER	28−Sep−2007 15:14	1866.0 FT	206.5 FT

OP System Version: 15C0−309

MCM

HILTB−FTB	SRPC−3402−Q3_2007	ECS−A	15C0−309
ECC−A	15C0−309	SGT−N	15C0−309
DTC−H	15C0−309		

PIP SUMMARY

Time Mark Every 60 S

BACKUP GAMMA RAY
From T1 to GR_1

SP (SP)
−160 (MV) 40

AIT−H 60 Inch Investigation (AHF60)
0 (OHMM) 100

Gamma Ray (GR)
150 (GAPI) 300

Cable Drag From STIA to STIT

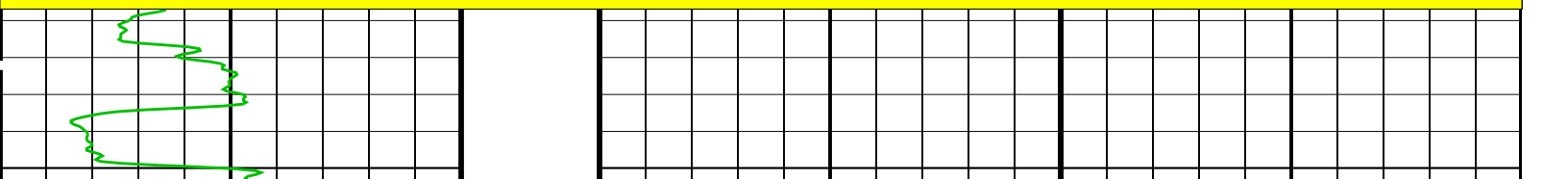
AIT−H 20 Inch Investigation (AHF20)
0 (OHMM) 100

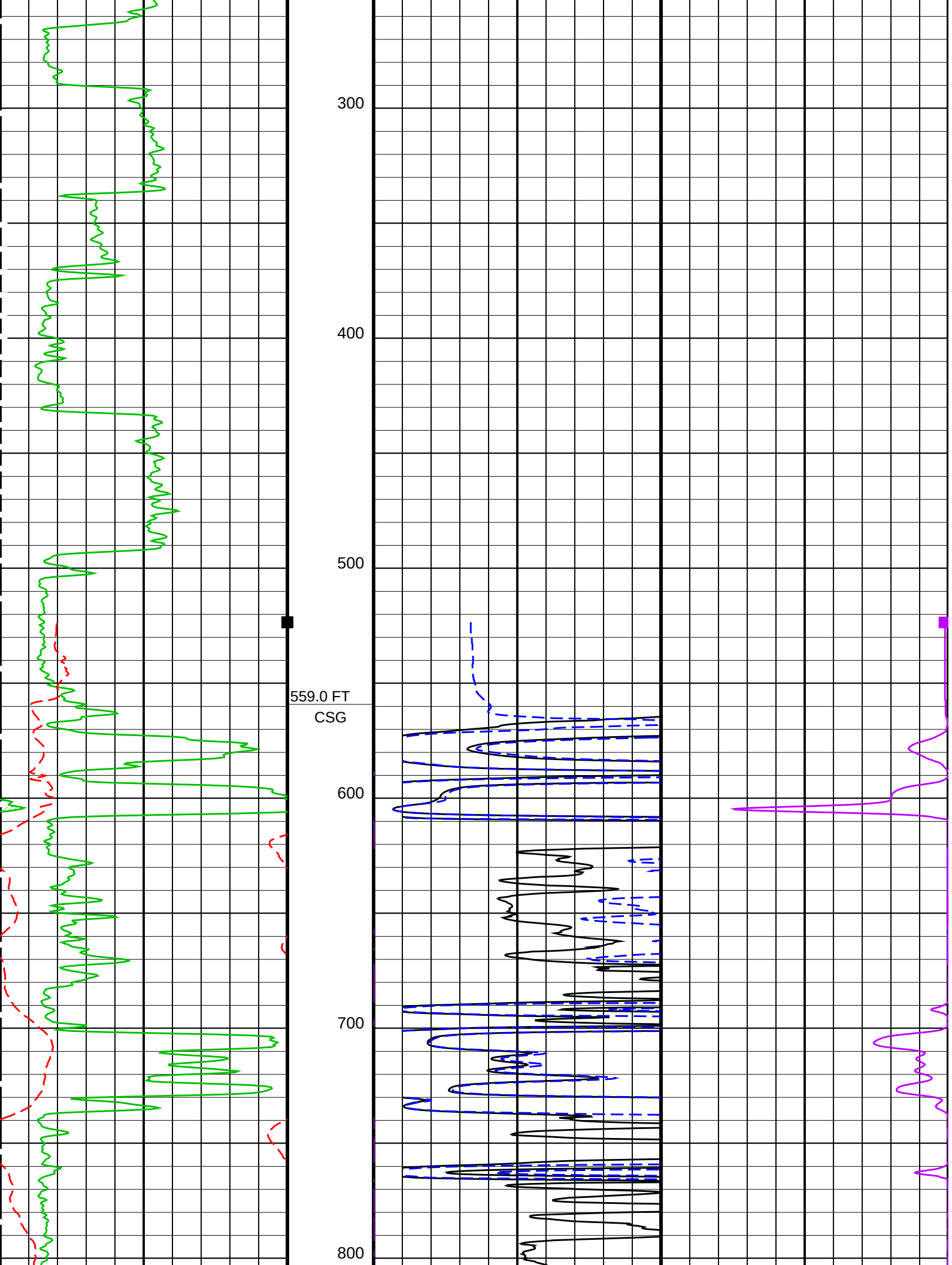
Gamma Ray (GR)
0 (GAPI) 150

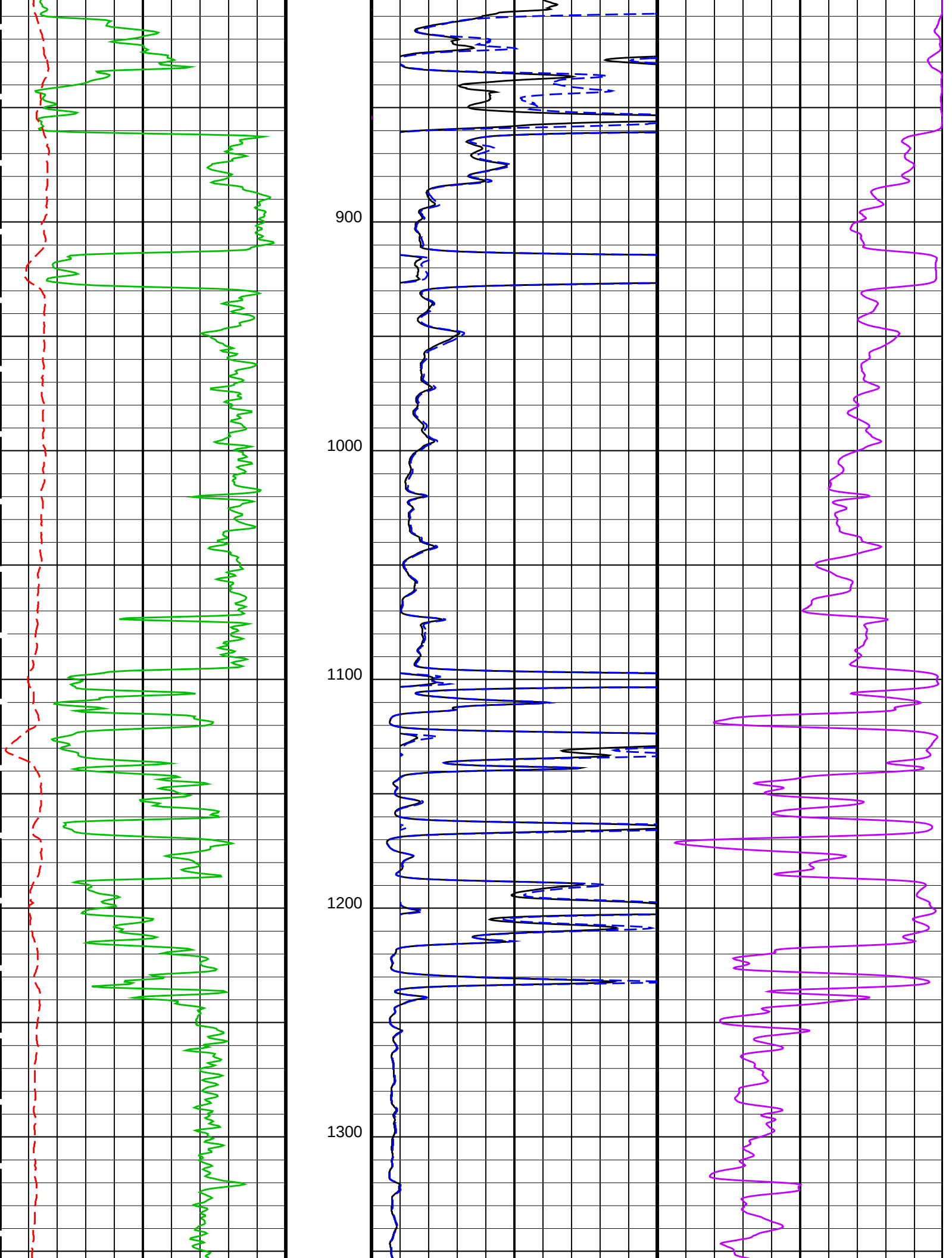
Stuck Stretch (STIT)
0 (F) 50

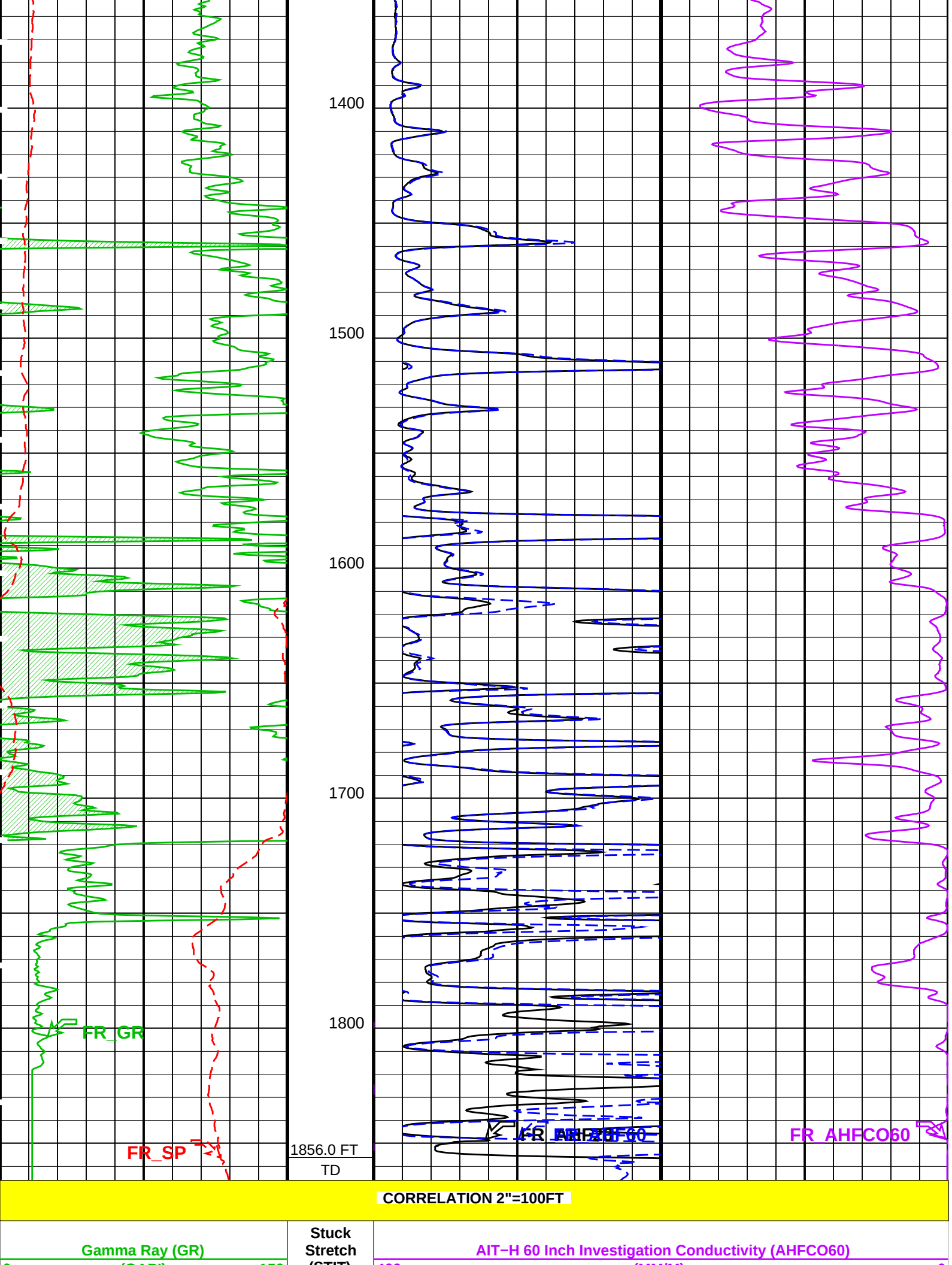
AIT−H 60 Inch Investigation Conductivity (AHFCO60)
400 (MM/M) 0

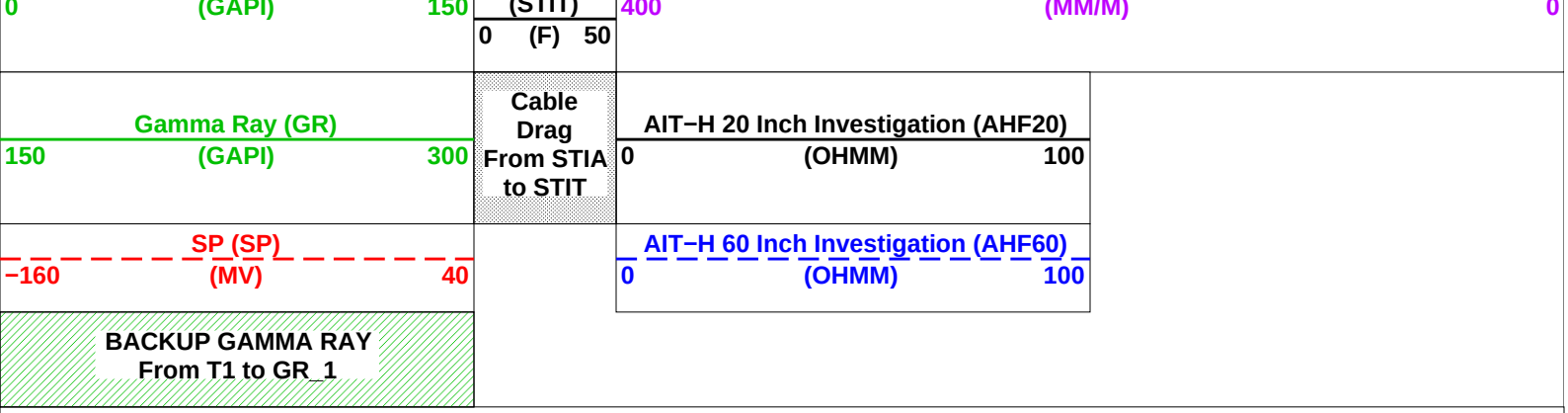
CORRELATION 2"=100FT




300
400
500
559.0 FT
CSG
600
700
800


900
1000
1100
1200
1300


1400
1500
1600
1700
1800
FR_GR
FR_SP
FR_AHFCO60
1856.0 FT
TD
CORRELATION 2"=100FT
Gamma Ray (GR)
Stuck Stretch (STIT)
AIT−H 60 Inch Investigation Conductivity (AHFCO60)



PIP SUMMARY

Time Mark Every 60 S

AIT−H Answer Product Processing Summary. Data taken with Tool # 303 (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 1.50 IN. Bit Size is 8.75 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)	0.885 OHMM	Mud Filtrate Sample Temperature (MFST)	88.390 DEGF
Resitivity Connate Water (RW)	1.000 OHMM		

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

Playback Mode: RECOMPUTE

(AHEBC) : Yes (AHEBL) : Yes (AHERP) : Yes

(AHBHM): 2_ComputeStandoff (AHBLM): 6_One_Two_and_Four (AHRPM): 1_Two

Parameters

DLIS Name	Description	Value	
	HILTB−FTB: High resolution Integrated Logging Tool−DTS		
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	1.5	IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
BHT	Bottom Hole Temperature (used in calculations)	89	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
SPNV	SP Next Value	0	MV
	SGT−N: Scintillation Gamma Ray Tool − N		
BHT	Bottom Hole Temperature (used in calculations)	89	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)	89	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
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth − Driller	1859.00	FT
TDL	Total Depth − Logger	1856.00	FT
System and Miscellaneous			
BS	Bit Size	8.750	IN
DFD	Drilling Fluid Density	9.00	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
FLEV	Fluid Level	−50000.00	FT
MST	Mud Sample Temperature	88.39	DEGF
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	1856	FT

Format: AIT_2 **Vertical Scale: 2" per 100'** **Graphics File Created: 28−Sep−2007 15:15**

OP System Version: 15C0−309

MCM

HILTB−FTB	SRPC−3402−Q3_2007	ECS−A	15C0−309
ECC−A	15C0−309	SGT−N	15C0−309
DTC−H	15C0−309		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_011LUP	FN:10	PRODUCER	28−Sep−2007 13:58	1866.0 FT	200.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_013PUP	FN:12	PRODUCER	28−Sep−2007 15:14

Company: STORM CAT ENERGY (USA) OPERATING CORP **Well: FILES 1−12H**

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_013PUP	FN:12	PRODUCER	28−Sep−2007 15:14	1866.0 FT	206.5 FT
DEFAULT	AIT_TLD_MCFL_CNL_010PUP	FN:9	PRODUCER	28−Sep−2007 13:54	1866.0 FT	1447.0 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 554.93 ft3

Cement Volume = 340.86 ft3 (assuming 5.50 in casing O.D.)

Computed from 1856.0 ft to 559.0 ft

OP System Version: 15C0−309

MCM

HILTD	SRPC−3402−Q3_2007	ECS	15C0−309
ECC−A	15C0−309	SGTN	15C0−309
DTCH	15C0−309		

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

CROSSOVER
From DPHZ to NPOR

GAMMA RAY BACKUP
From LHT1 to GR_1

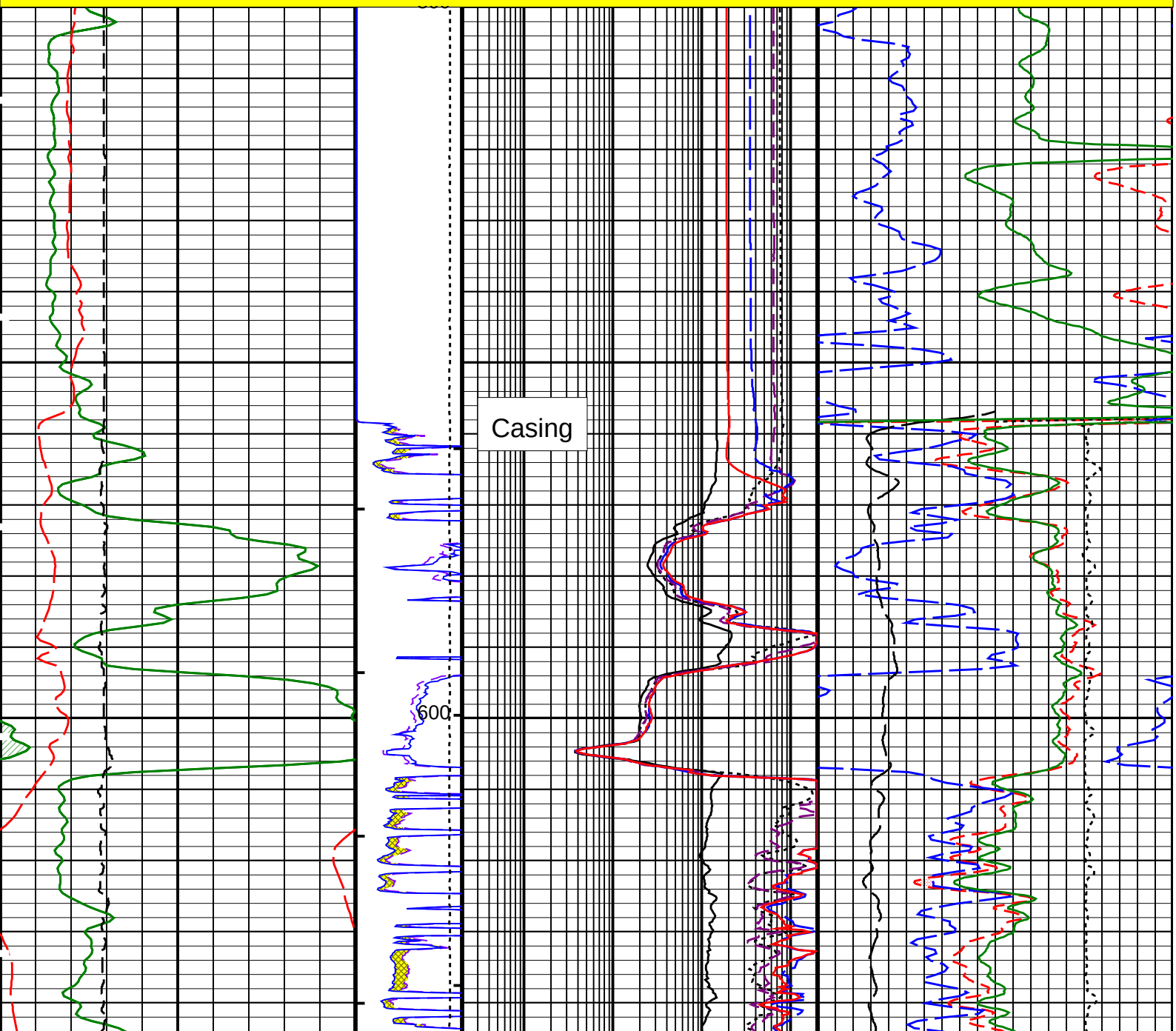
AIT−H 90 Inch Investigation (AHT90)
0.2 (OHMM) 2000

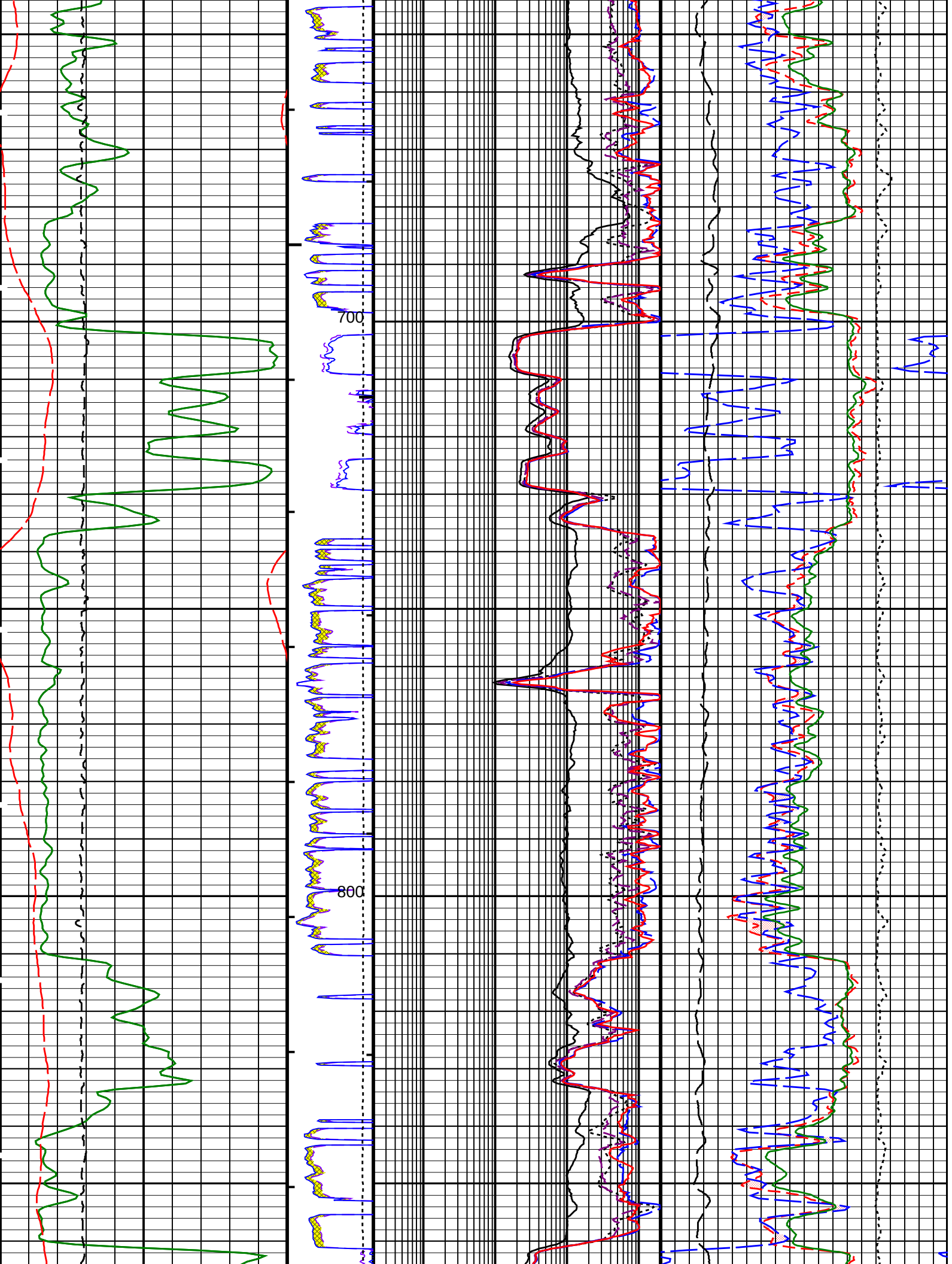
Std. Res. Formation Density (RHOZ)
2 (G/C3) 3

Computed

SP (SP) −160 (MV) 40	Micro Inverse (HMIN) (OHMM) 0 40	AIT−H 60 Inch Investigation (AHT60) 0.2 (OHMM) 2000	Std. Res. Formation Pe (PEFZ) 0 (−−−− 10	Density Correction (HDRA) −0.25 (G/C3) 0.25
HILT Caliper (HCAL) 6 (IN) 16	Computed Micro Normal (HMNO) (OHMM) 0 40	AIT−H 30 Inch Investigation (AHT30) 0.2 (OHMM) 2000	Alpha Processed Neutron Porosity (NPOR) 0.7 (V/V) 0.3	
Gamma Ray (GR) 150 (GAPI) 300	MICROLOG From HMIN to HMNO	AIT−H 20 Inch Investigation (AHT20) 0.2 (OHMM) 2000	Alpha Processed Neutron Porosity (NPOR) 0.3 (V/V) −0.1	
Gamma Ray (GR) 0 (GAPI) 150	Tension (TENS) (LBF) 10000 0	AIT−H 10 Inch Investigation (AHT10) 0.2 (OHMM) 2000	Std. Res. Density Porosity (DPHZ) 0.3 (V/V) −0.1	

PLATFORM EXPRESS − TRIPLE COMBO MAIN PASS / 5 IN = 100 FT

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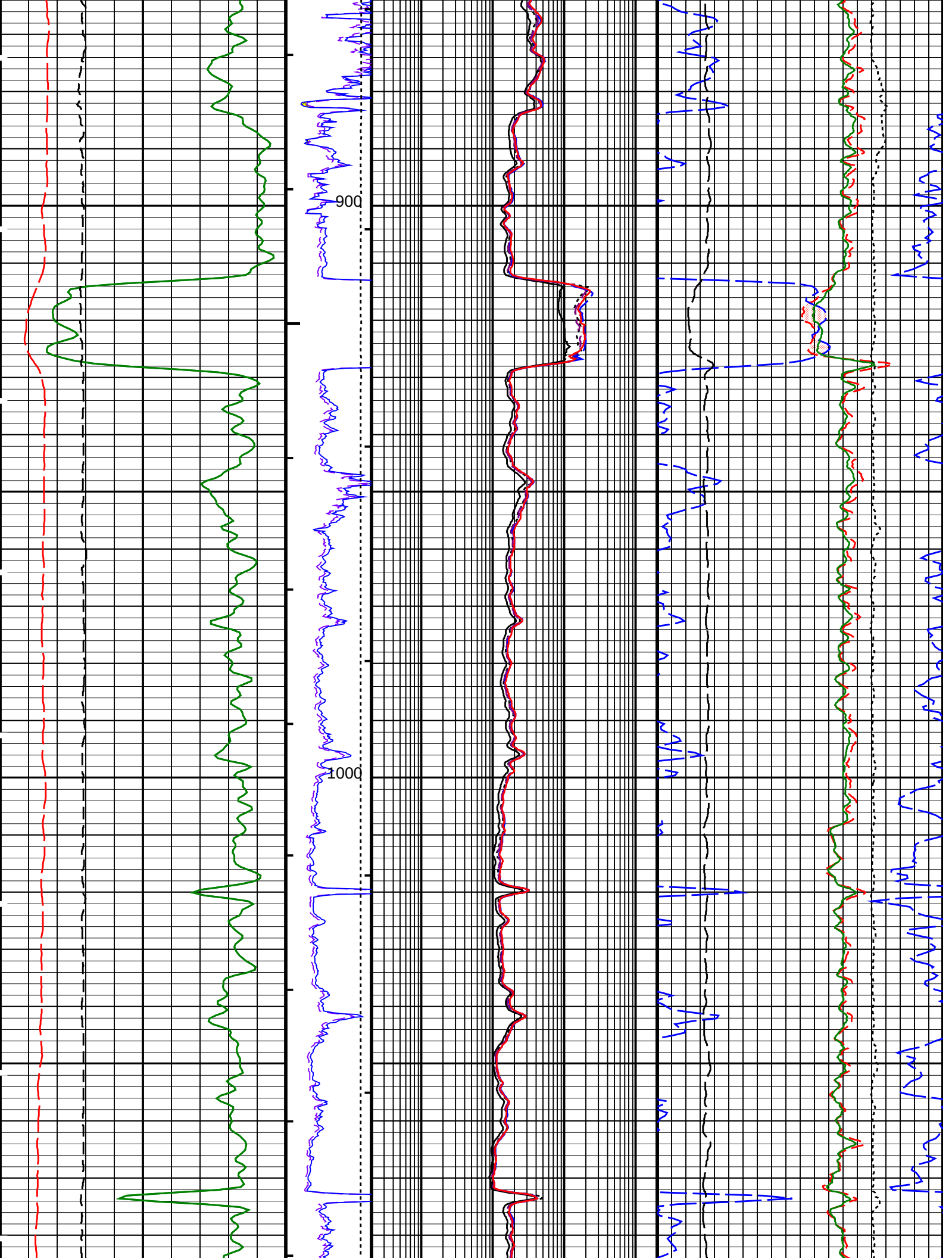
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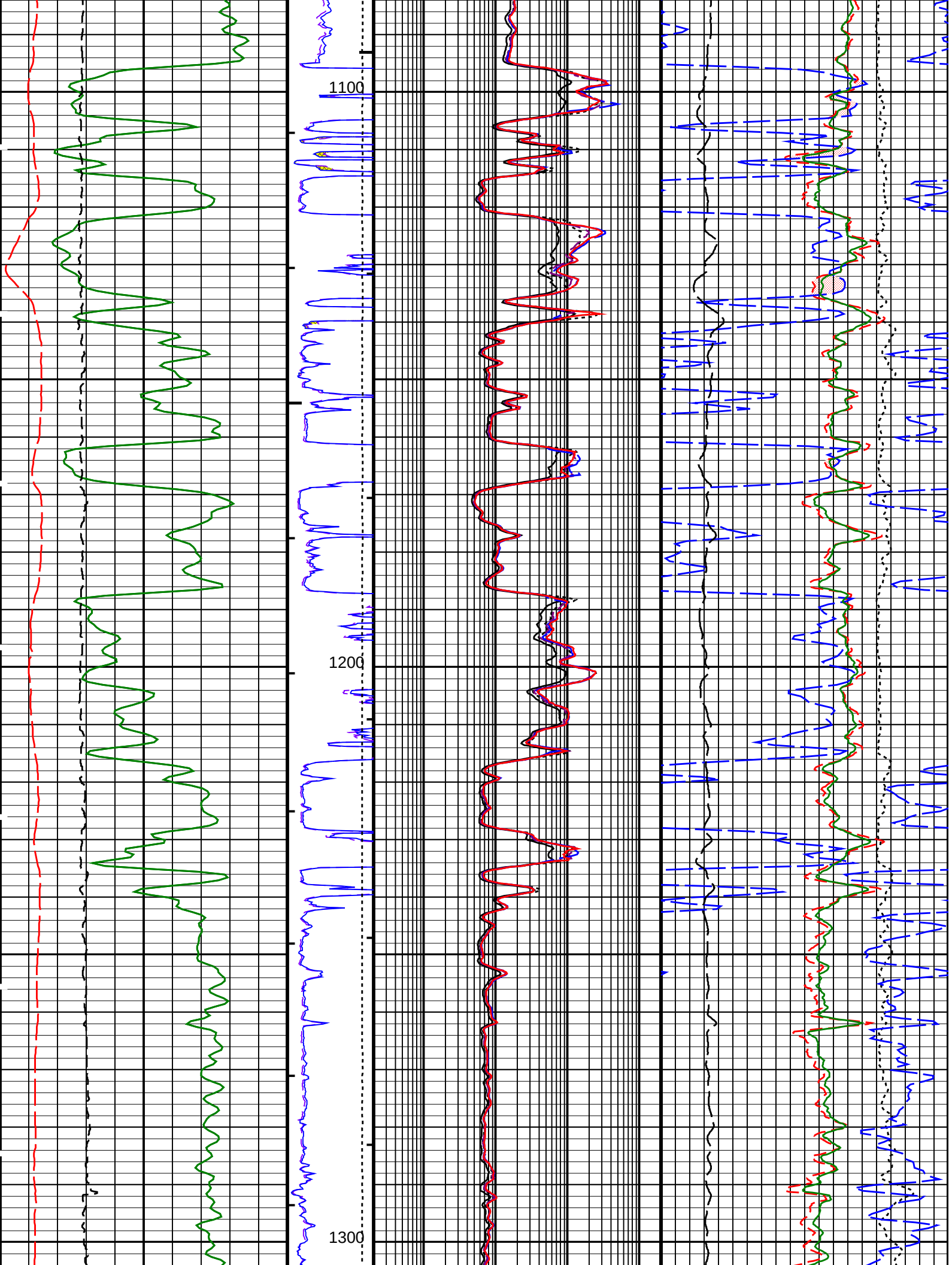
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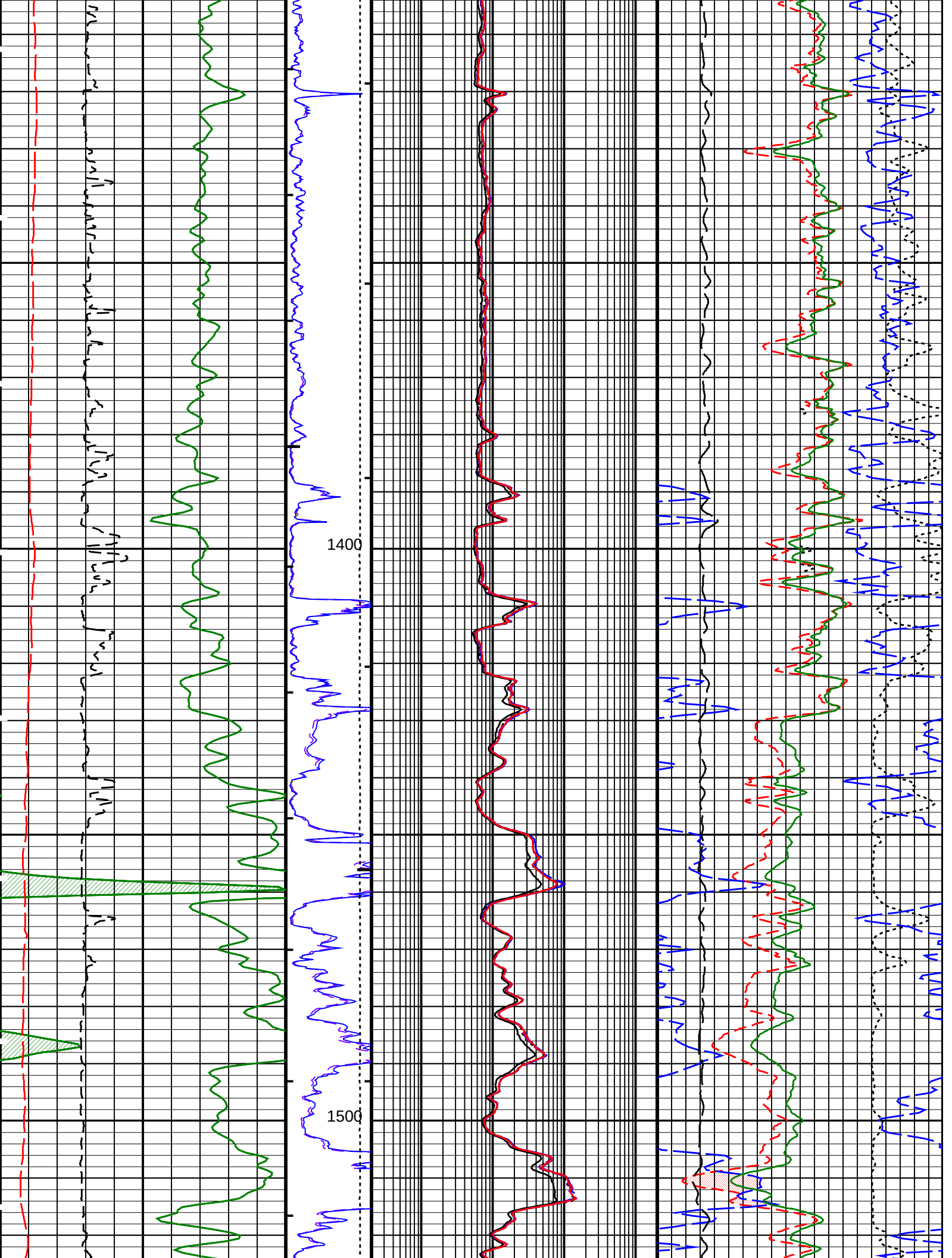
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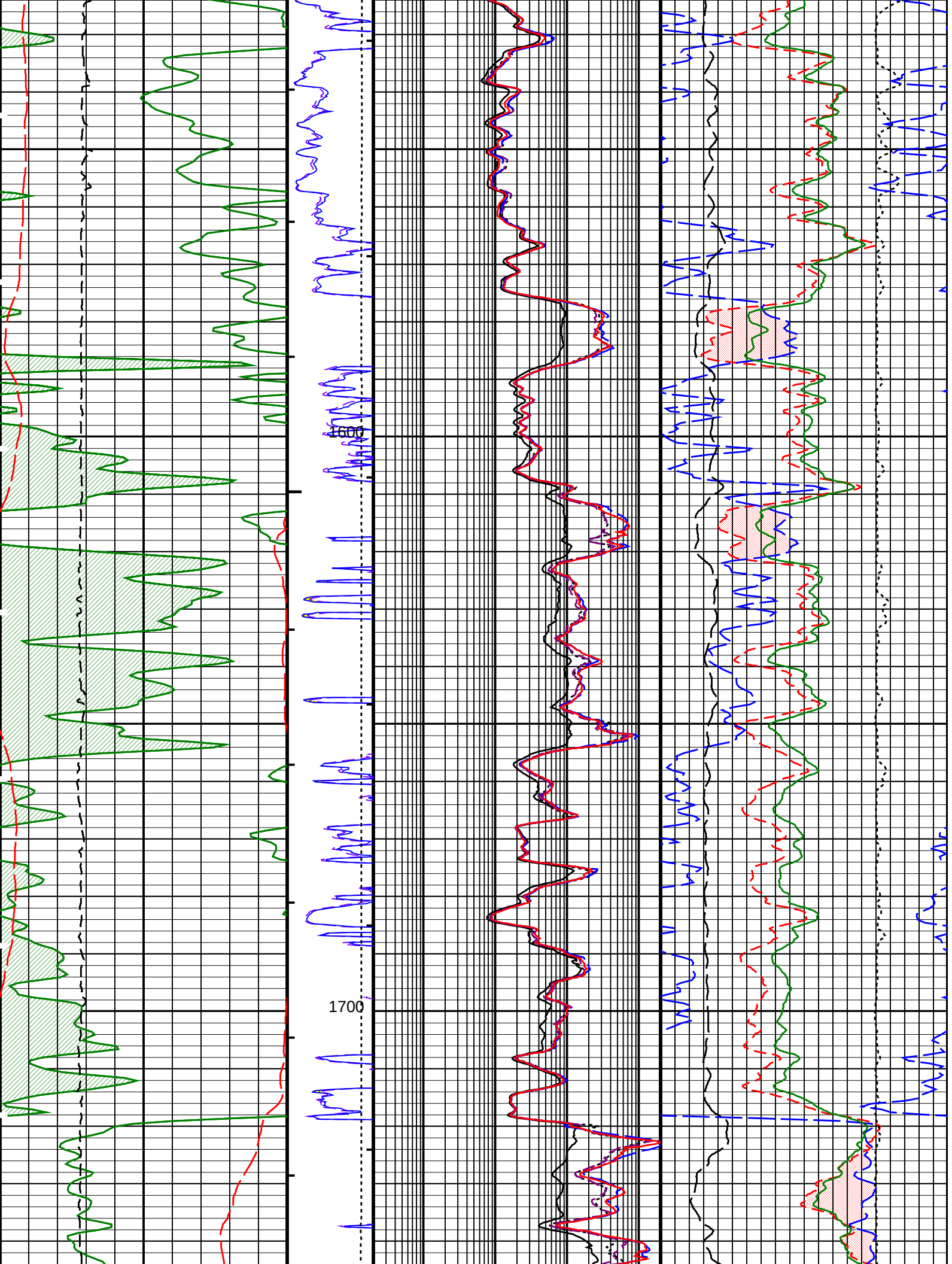
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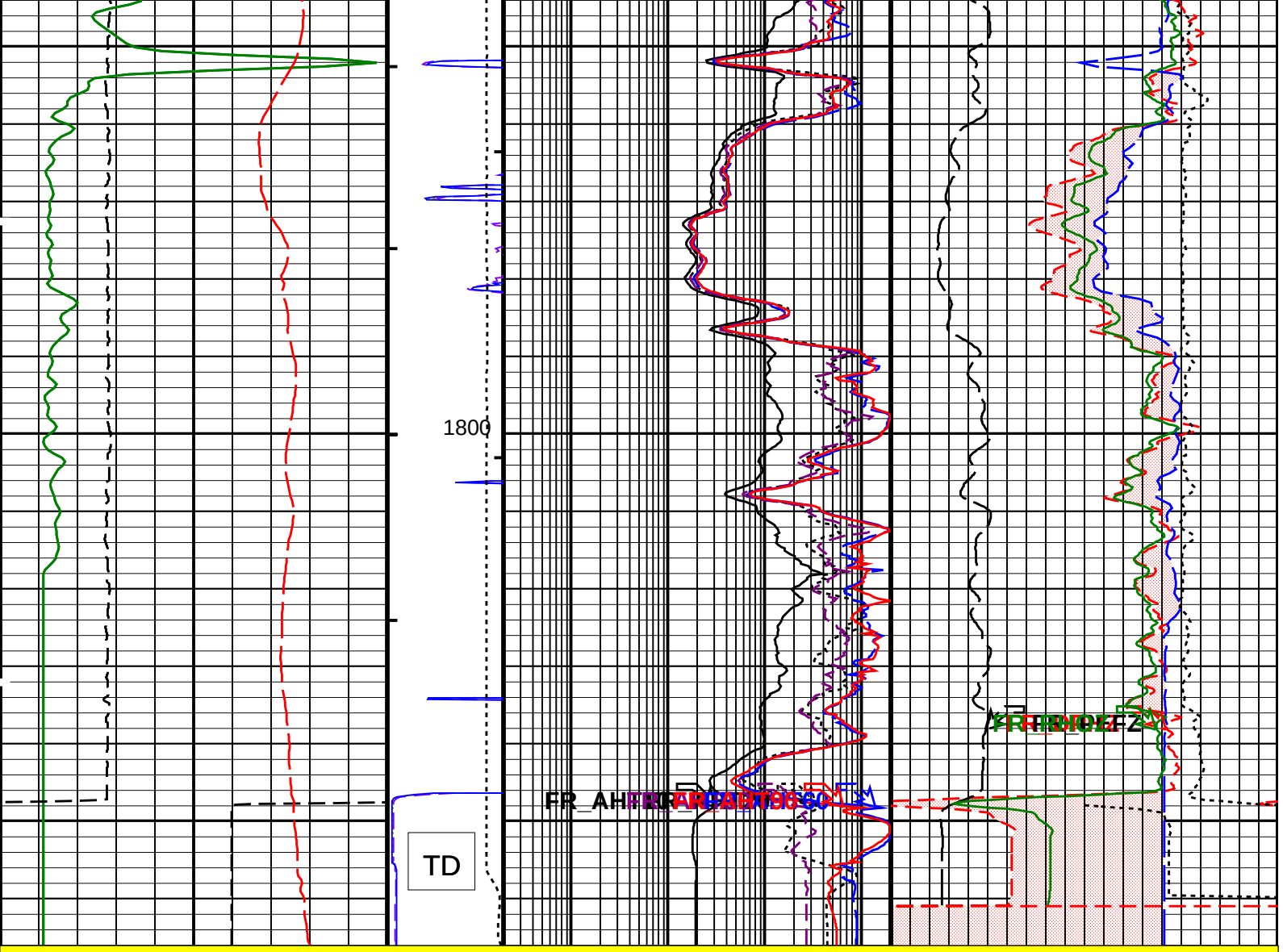


PLATFORM EXPRESS − TRIPLE COMBO MAIN PASS / 5 IN = 100 FT

Gamma Ray (GR) 0 (GAPI) 150	Tension (TENS) (LBF) 10000 0	AIT−H 10 Inch Investigation (AHT10) 0.2 (OHMM) 2000	Std. Res. Density Porosity (DPHZ) 0.3 (V/V) −0.1
Gamma Ray (GR) 150 (GAPI) 300	MICROLOG From HMIN to HMNO	AIT−H 20 Inch Investigation (AHT20) 0.2 (OHMM) 2000	Alpha Processed Neutron Porosity (NPOR) 0.3 (V/V) −0.1
HILT Caliper (HCAL) 6 (IN) 16	Computed Micro Normal (HMNO) (OHMM) 0 40	AIT−H 30 Inch Investigation (AHT30) 0.2 (OHMM) 2000	Alpha Processed Neutron Porosity (NPOR) 0.7 (V/V) 0.3
SP (SP) −160 (MV) 40	Computed Micro Inverse (HMIN) (OHMM) 0 40	AIT−H 60 Inch Investigation (AHT60) 0.2 (OHMM) 2000	Std. Res. Formation Pe (PEFZ) 0 (−−−− 10 Density Correction (HDRA) −0.25 (G/C3) 0.25
GAMMA RAY BACKUP From LHT1 to GR_1		AIT−H 90 Inch Investigation (AHT90) 0.2 (OHMM) 2000	Std. Res. Formation Density (RHOZ) 2 (G/C3) 3
			CROSSOVER From DPHZ to NPOR

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	
	HILTB−FTB: High resolution Integrated Logging Tool−DTS		
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	1.500	in
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	89.000	degF
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
FEXP	Form Factor Exponent	2.000	
FNUM	Form Factor Numerator	1.000	
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
GRSE	Generalized Mud Resistivity Selection	AHMF	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
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
MPOF	MCFL Processing Operation Mode	ON	
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	STDRES	
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	NO	
SPDR	SP Drift	0.000	mV/ft
SPNV	SP Next Value	0.000	mV
	SGT−N: Scintillation Gamma Ray Tool − N		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	89.000	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	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	68.000	degF
	HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	89.000	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	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	68.000	degF

	STI: Stuck Tool Indicator		
TDL	Total Depth − Logger	1856.0	ft
	System and Miscellaneous		
BS	Bit Size	8.750	in
BSAL	Borehole Salinity		
CSIZ	Current Casing Size	9.625	in
CWEI	Casing Weight	36.000	lbm/ft
DFD	Drilling Fluid Density	9.000	lbm/gal
FLEV	Fluid Level		
FSAL	Formation Salinity		
MST	Mud Sample Temperature	88.390	degF
RMFS	Resistivity of Mud Filtrate Sample	0.885	ohm.m
TD	Total Depth	1856.0	ft

Format: MUD_TCOM_MAIN Vertical Scale: 5" per 100' Graphics File Created: 28−Sep−2007 15:32

OP System Version: 15C0−309

MCM

HILTD	SRPC−3402−Q3_2007	ECS	15C0−309
ECC−A	15C0−309	SGTN	15C0−309
DTCH	15C0−309		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_013PUP	FN:12	PRODUCER	28−Sep−2007 15:14	1866.0 FT	206.5 FT
DEFAULT	AIT_TLD_MCFL_CNL_010PUP	FN:9	PRODUCER	28−Sep−2007 13:54	1866.0 FT	1447.0 FT

Company: STORM CAT ENERGY (USA) OPERATING CORP Well: FILES 1−12H

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_010PUP	FN:9	PRODUCER	28−Sep−2007 13:54	1866.0 FT	1447.0 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 170.22 ft3

Cement Volume = 102.74 ft3 (assuming 5.50 in casing O.D.)

Computed from 1856.0 ft to 1447.5 ft

OP System Version: 15C0−309

MCM

HILTD	SRPC−3402−Q3_2007	ECS	15C0−309
ECC−A	15C0−309	SGTN	15C0−309
DTCH	15C0−309		

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

CROSSOVER
From DPHZ to NPOR

GAMMA RAY BACKUP
From LHT1 to GR_1

AIT−H 90 Inch Investigation (AHT90)
0.2 (OHMM) 2000

Std. Res. Formation Density (RHOZ)
2 (G/C3) 3

SP (SP)
−160 (MV) 40

Computed Micro Inverse (HMIN) (OHMM)
0 40

AIT−H 60 Inch Investigation (AHT60)
0.2 (OHMM) 2000

Std. Res. Formation Pe (PEFZ)
0 (−−−− 10

Density Correction (HDRA)
−0.25 (G/C3) 0.25

HILT Caliper (HCAL)
6 (IN) 16

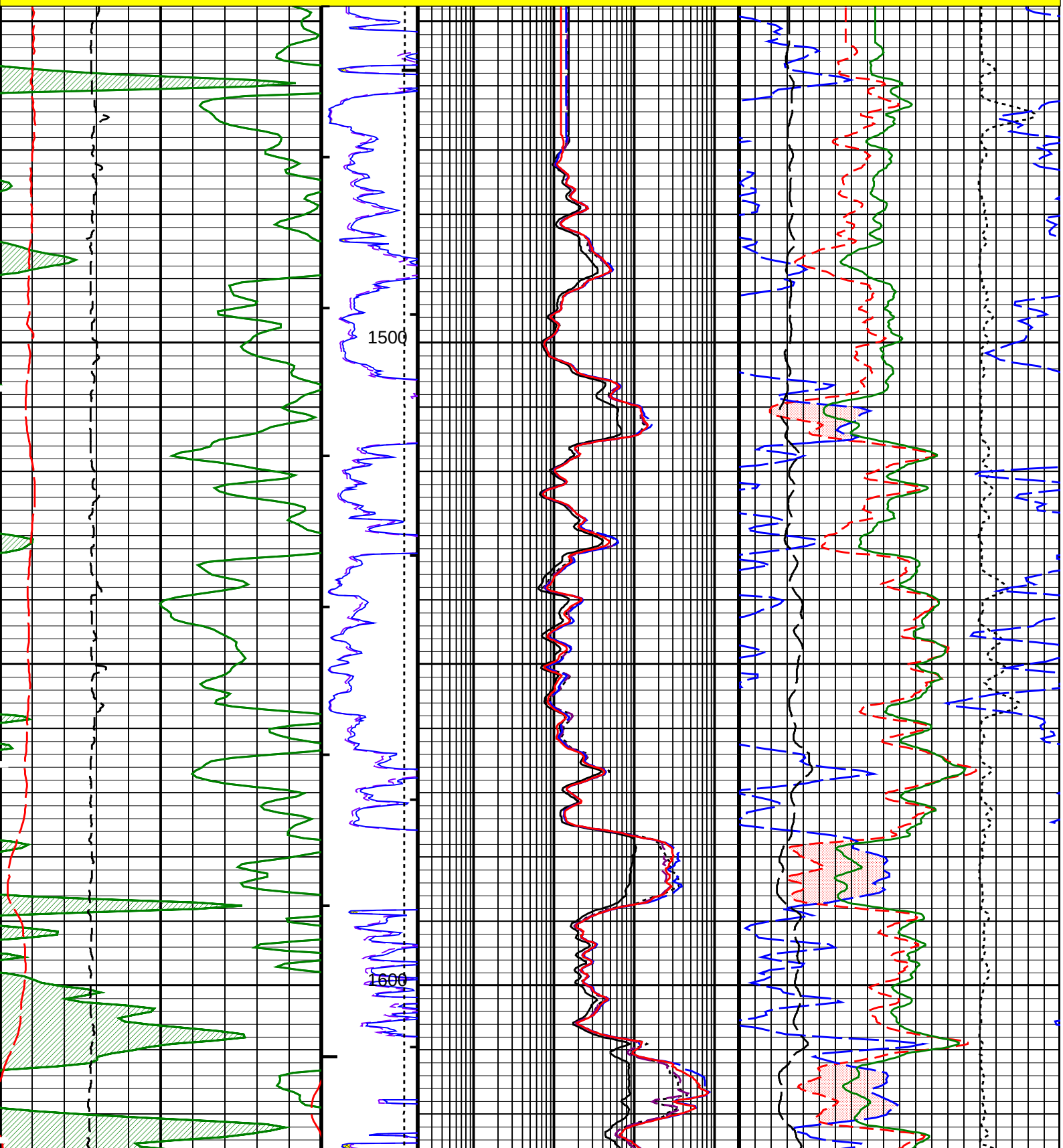
Computed Micro Normal (HMNO) (OHMM)
0 40

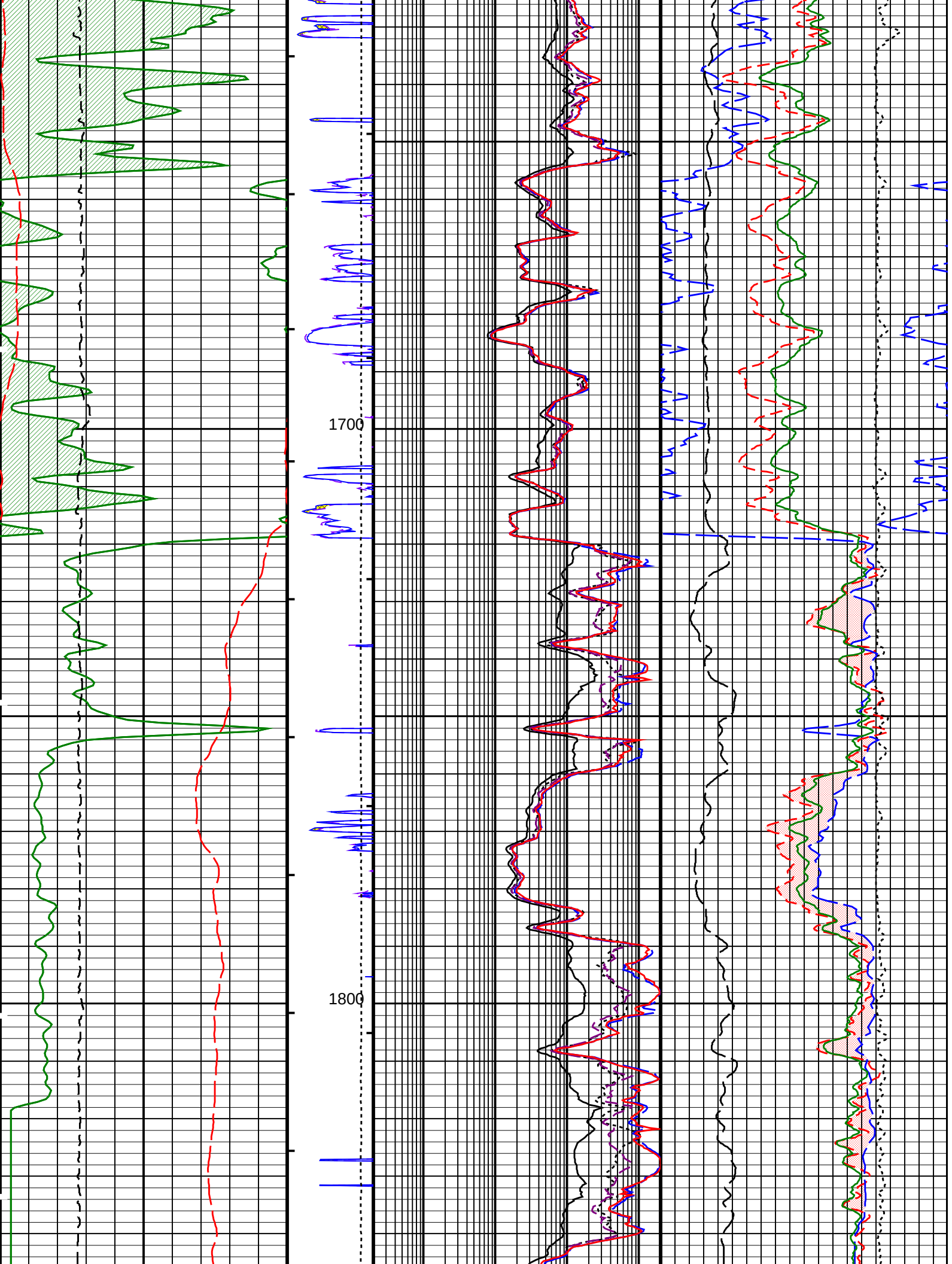
AIT−H 30 Inch Investigation (AHT30)
0.2 (OHMM) 2000

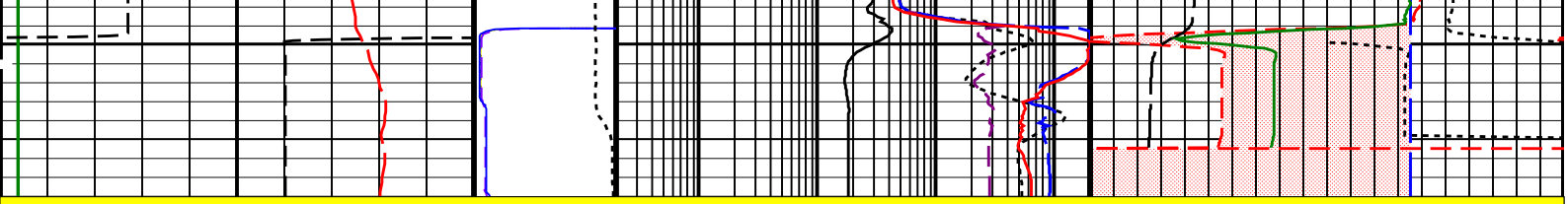
Alpha Processed Neutron Porosity (NPOR)
0.7 (V/V) 0.3

Gamma Ray (GR)	MICROLOG From HMIN to HMNO	AIT−H 20 Inch Investigation (AHT20)	Alpha Processed Neutron Porosity (NPOR)
150 (GAPI) 300		0.2 (OHMM) 2000	0.3 (V/V) −0.1
Gamma Ray (GR)	**Tension (TENS) (LBF)**	**AIT−H 10 Inch Investigation (AHT10)**	**Std. Res. Density Porosity (DPHZ)**
0 (GAPI) 150	10000 0	0.2 (OHMM) 2000	0.3 (V/V) −0.1

PLATFORM EXPRESS − TRIPLE COMBO REPEAT SECTION / 5 IN = 100 FT




1700
1800



PLATFORM EXPRESS − TRIPLE COMBO REPEAT SECTION / 5 IN = 100 FT

Gamma Ray (GR) 0 (GAPI) 150	Tension (TENS) (LBF) 10000 0	AIT−H 10 Inch Investigation (AHT10) 0.2 (OHMM) 2000	Std. Res. Density Porosity (DPHZ) 0.3 (V/V) −0.1
Gamma Ray (GR) 150 (GAPI) 300	MICROLOG From HMIN to HMNO	AIT−H 20 Inch Investigation (AHT20) 0.2 (OHMM) 2000	Alpha Processed Neutron Porosity (NPOR) 0.3 (V/V) −0.1
HILT Caliper (HCAL) 6 (IN) 16	Computed Micro Normal (HMNO) (OHMM) 0 40	AIT−H 30 Inch Investigation (AHT30) 0.2 (OHMM) 2000	Alpha Processed Neutron Porosity (NPOR) 0.7 (V/V) 0.3
SP (SP) −160 (MV) 40	Computed Micro Inverse (HMIN) (OHMM) 0 40	AIT−H 60 Inch Investigation (AHT60) 0.2 (OHMM) 2000	Std. Res. Formation Pe (PEFZ) 0 (−−−− 10 / Density Correction (HDRA) −0.25 (G/C3) 0.25
GAMMA RAY BACKUP From LHT1 to GR_1		AIT−H 90 Inch Investigation (AHT90) 0.2 (OHMM) 2000	Std. Res. Formation Density (RHOZ) 2 (G/C3) 3
			CROSSOVER From DPHZ to NPOR

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	
	HILTB−FTB: High resolution Integrated Logging Tool−DTS		
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	1.500	in
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	212.0	degF
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
FEXP	Form Factor Exponent	2.000	
FNUM	Form Factor Numerator	1.000	

FNUM	Form Factor Numerator	1.000	
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
GRSE	Generalized Mud Resistivity Selection	AHMF	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
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
MPOF	MCFL Processing Operation Mode	ON	
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	STDRES	
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	NO	
SPDR	SP Drift	0.000	mV/ft
SPNV	SP Next Value	0.000	mV
	SGT−N: Scintillation Gamma Ray Tool − N		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	212.0	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	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	68.000	degF
	HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	212.0	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	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	68.000	degF
	STI: Stuck Tool Indicator		
TDL	Total Depth − Logger	1856.0	ft
	System and Miscellaneous		
BS	Bit Size	8.750	in
BSAL	Borehole Salinity		
CSIZ	Current Casing Size	9.625	in
CWEI	Casing Weight	36.000	lbm/ft
DFD	Drilling Fluid Density	9.000	lbm/gal
FLEV	Fluid Level		
FSAL	Formation Salinity		
MST	Mud Sample Temperature		
RMFS	Resistivity of Mud Filtrate Sample		
TD	Total Depth	1856.0	ft

Format: MUD_TCOM_REPEAT_SECTION **Vertical Scale: 5" per 100'** **Graphics File Created: 28−Sep−2007 15:34**

OP System Version: 15C0−309

MCM

HILTD	SRPC−3402−Q3_2007	ECS	15C0−309
ECC−A	15C0−309	SGTN	15C0−309
DTCH	15C0−309		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_010PUP	FN:9	PRODUCER	28−Sep−2007 13:54	1866.0 FT	1447.0 FT

Company: STORM CAT ENERGY (USA) OPERATING CORP **Well: FILES 1−12H**

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_013PUP	FN:12	PRODUCER	28−Sep−2007 15:14	1866.0 FT	206.5 FT
DEFAULT	AIT_TLD_MCFL_CNL_010PUP	FN:9	PRODUCER	28−Sep−2007 13:54	1866.0 FT	1447.0 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 554.93 ft3

Cement Volume = 340.86 ft3 (assuming 5.50 in casing O.D.)

Computed from 1856.0 ft to 559.0 ft

OP System Version: 15C0−309

MCM

HILTD	SRPC−3402−Q3_2007	ECS	15C0−309
ECC−A	15C0−309	SGTN	15C0−309
DTCH	15C0−309		

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

CROSSOVER
From DPHZ to NPOR

GAMMA RAY BACKUP
From LHT1 to GR_1

AHT90_REP Curve (AHT90_REP)
0.2 (OHMM) 2000

RHOZ_REP Curve (RHOZ_REP)
2 (G/C3) 3

SP_REP Curve (SP_REP)
−160 (MV) 40

TENS_REP Curve (TENS_REP) (LBF)
10000 0

AHT60_REP Curve (AHT60_REP)
0.2 (OHMM) 2000

PEFZ_REP Curve (PEFZ_REP)
0 (−−−− 10

HDRA_REP Curve (HDRA_REP)
−0.25 (G/C3) 0.25

HCAL_REP Curve (HCAL_REP)
6 (IN) 16

HMIN_REP Curve (HMIN_REP) (OHMM)
0 40

AHT30_REP Curve (AHT30_REP)
0.2 (OHMM) 2000

NPOR_1_REP Curve (NPOR_REP)
0.7 (V/V) 0.3

GR_1_REP Curve (GR_REP)
150 (GAPI) 300

HMNO_REP Curve (HMNO_REP) (OHMM)
0 40

AHT20_REP Curve (AHT20_REP)
0.2 (OHMM) 2000

NPOR_REP Curve (NPOR_REP)
0.3 (V/V) −0.1

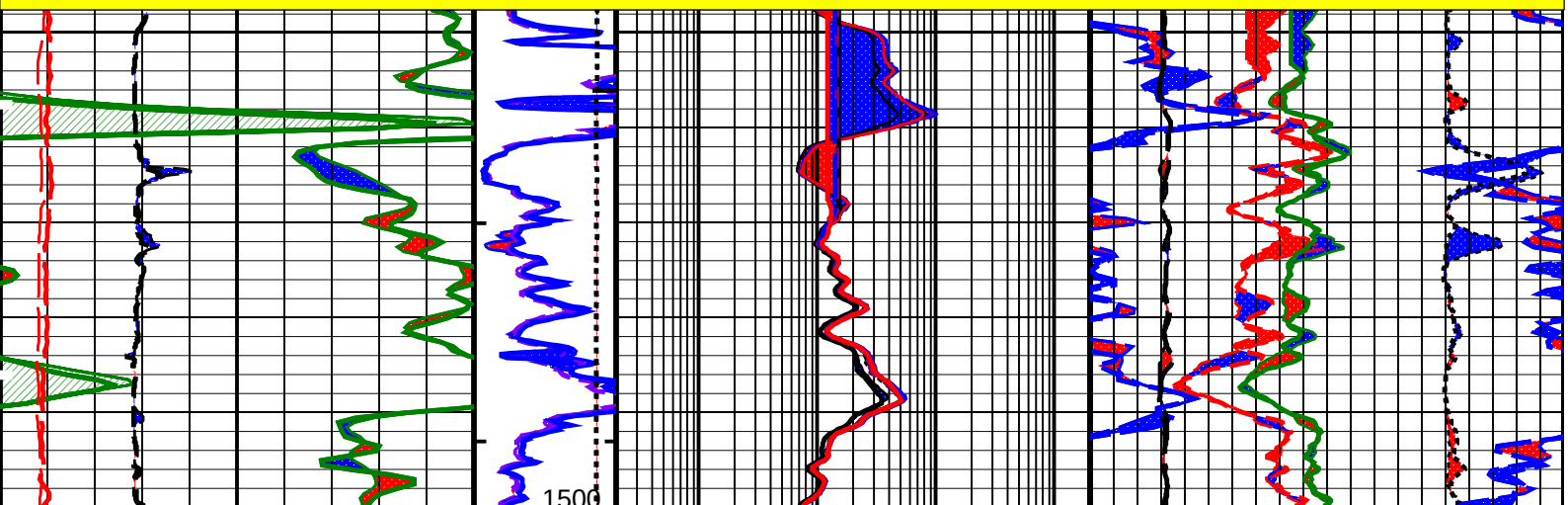
GR_REP Curve (GR_REP)
0 (GAPI) 150

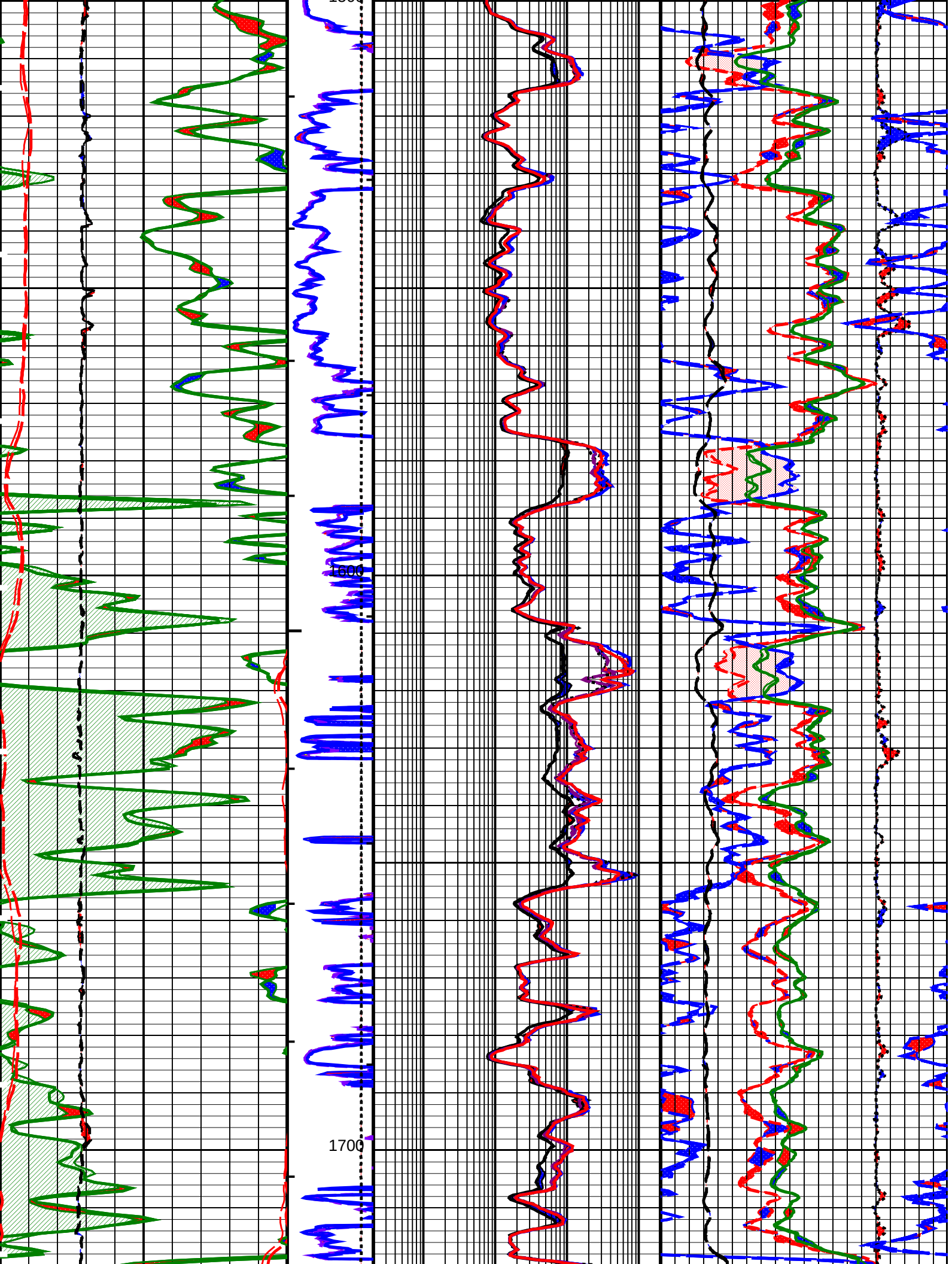
MICROLOG From HMIN to HMNO

AHT10_REP Curve (AHT10_REP)
0.2 (OHMM) 2000

DPHZ_REP Curve (DPHZ_REP)
0.3 (V/V) −0.1

PLATFORM EXPRESS − TRIPLE COMBO REPEAT ANALYSIS / 5 IN = 100 FT

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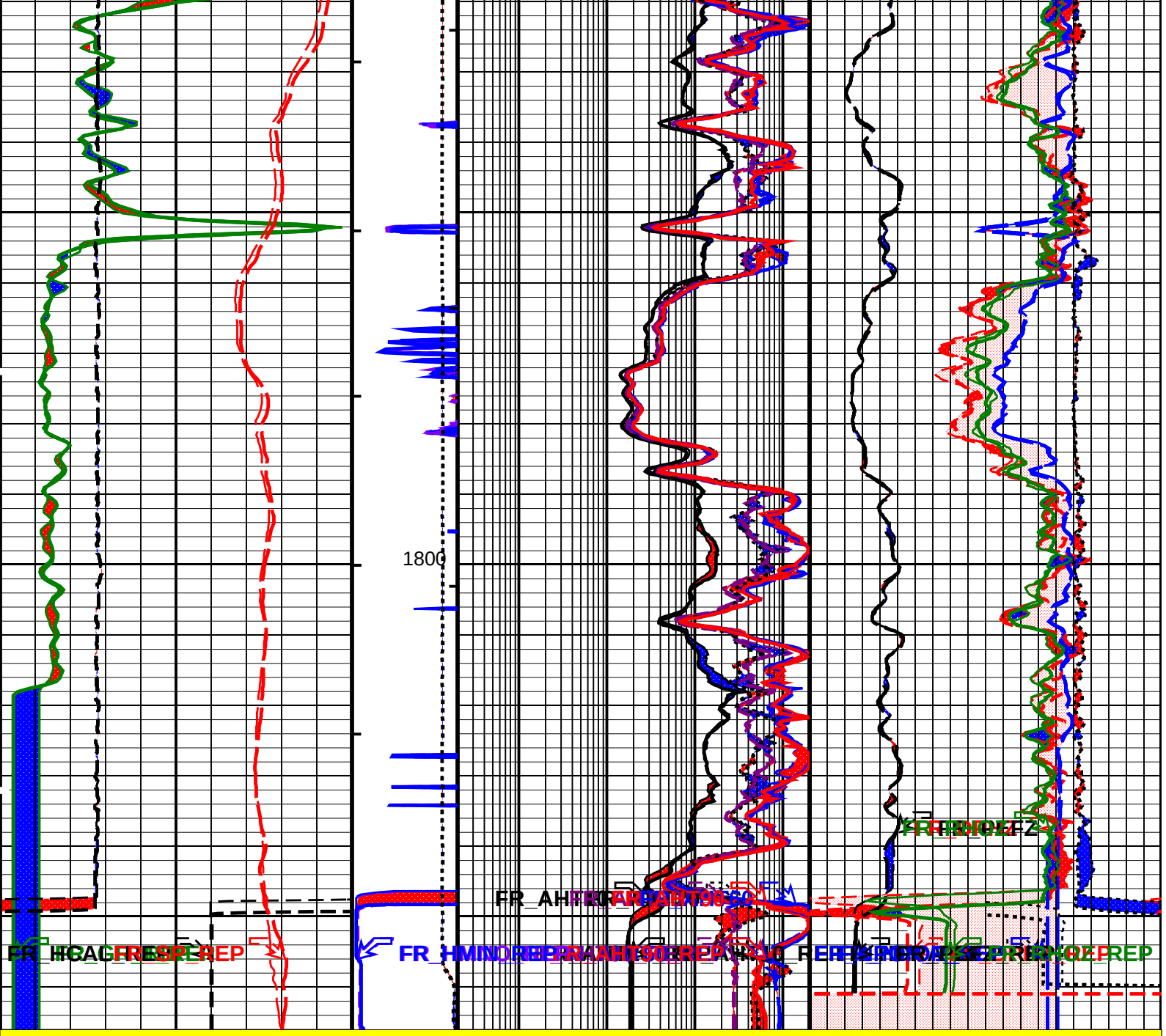
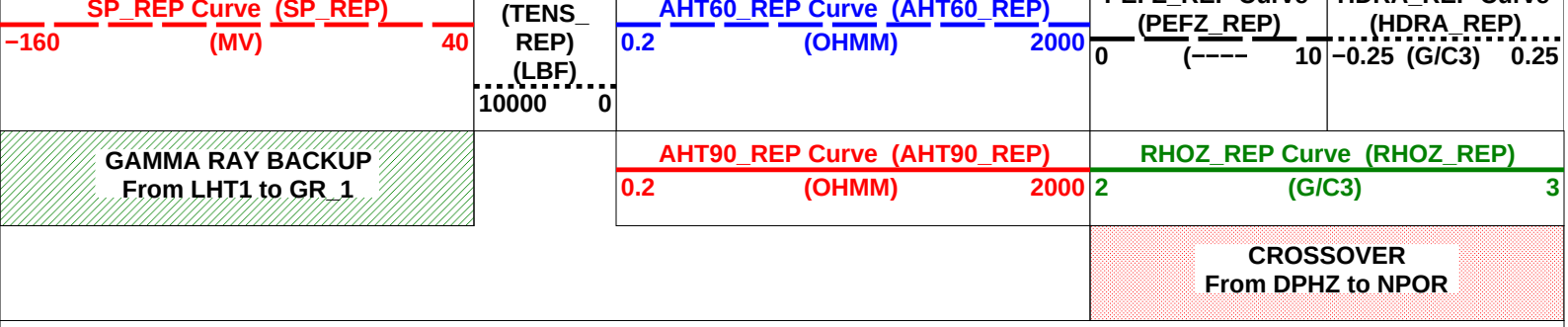


PLATFORM EXPRESS – TRIPLE COMBO REPEAT ANALYSIS / 5 IN = 100 FT

GR_REP Curve (GR_REP) 0 (GAPI) 150	MICROLOG From HMIN to HMNO	AHT10_REP Curve (AHT10_REP) 0.2 (OHMM) 2000	DPHZ_REP Curve (DPHZ_REP) 0.3 (V/V) −0.1
GR_1_REP Curve (GR_REP) 150 (GAPI) 300	HMNO_REP Curve (HMNO_REP) (OHMM) 0 40	AHT20_REP Curve (AHT20_REP) 0.2 (OHMM) 2000	NPOR_REP Curve (NPOR_REP) 0.3 (V/V) −0.1
HCAL_REP Curve (HCAL_REP) 6 (IN) 16	HMIN_REP Curve (HMIN_REP) (OHMM) 0 40	AHT30_REP Curve (AHT30_REP) 0.2 (OHMM) 2000	NPOR_1_REP Curve (NPOR_REP) 0.7 (V/V) 0.3
	TENS_REP Curve		PEFZ_REP Curve / HDRA_REP Curve



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

Format: MUD_TCOM_MAIN_REP **Vertical Scale: 5" per 100'** **Graphics File Created: 28−Sep−2007 15:32**

OP System Version: 15C0−309

MCM

HILTD	SRPC−3402−Q3_2007	ECS	15C0−309
ECC−A	15C0−309	SGTN	15C0−309
DTCH	15C0−309		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_013PUP	FN:12	PRODUCER	28−Sep−2007 15:14	1866.0 FT	206.5 FT
DEFAULT	AIT_TLD_MCFL_CNL_010PUP	FN:9	PRODUCER	28−Sep−2007 13:54	1866.0 FT	1447.0 FT

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Electronics Calibration Check − Thru Cal Mag. & Phase							
Master: 21−Jul−2007 17:20 Before: 28−Sep−2007 6:43							
Thru Cal Magnitude − 0	0	0.6375	0.6421	N/A	N/A	N/A	V
Thru Cal Magnitude − 1	0	1.308	1.318	N/A	N/A	N/A	V
Thru Cal Magnitude − 2	0	0.6482	0.6538	N/A	N/A	N/A	V
Thru Cal Magnitude − 3	0	0.7317	0.7377	N/A	N/A	N/A	V
Thru Cal Magnitude − 4	0	1.374	1.385	N/A	N/A	N/A	V
Thru Cal Magnitude − 5	0	1.998	2.014	N/A	N/A	N/A	V
Thru Cal Magnitude − 6	0	1.996	2.011	N/A	N/A	N/A	V
Thru Cal Magnitude − 7	0	1.446	1.460	N/A	N/A	N/A	V
Phase − 0	0	70.24	71.21	N/A	N/A	N/A	DEG
Phase − 1	0	69.12	70.09	N/A	N/A	N/A	DEG
Phase − 2	0	65.65	66.63	N/A	N/A	N/A	DEG
Phase − 3	0	64.90	65.88	N/A	N/A	N/A	DEG
Phase − 4	0	58.79	59.81	N/A	N/A	N/A	DEG
Phase − 5	0	57.16	58.20	N/A	N/A	N/A	DEG
Phase − 6	0	57.17	58.21	N/A	N/A	N/A	DEG
Phase − 7	0	56.30	57.53	N/A	N/A	N/A	DEG
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Electronics Calibration Check − Auxilliary							
Master: 21−Jul−2007 17:20 Before: 28−Sep−2007 6:43							
Array Induction SPA Plus	990.5	991.2	992.6	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	−0.01815	−0.07321	N/A	N/A	N/A	MV
Array Induction Temperature Pl	0.9150	0.9180	0.9192	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	−0.00001028	−0.00006897	N/A	N/A	N/A	V
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Test Loop Gain Correction							
Master: 21−Jul−2007 17:20							
Test Loop Gain Magnitude − 0	0	1.012	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude − 1	0	1.010	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude − 2	0	1.007	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude − 3	0	0.9994	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude − 4	0	0.9885	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude − 5	0	0.9844	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude − 6	0	0.9957	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude − 7	0	1.003	N/A	N/A	N/A	N/A	V

Phase − 0	0	0.4224	N/A	N/A	N/A	N/A	DEG
Phase − 1	0	0.3222	N/A	N/A	N/A	N/A	DEG
Phase − 2	0	0.2178	N/A	N/A	N/A	N/A	DEG
Phase − 3	0	0.7772	N/A	N/A	N/A	N/A	DEG
Phase − 4	0	0.04380	N/A	N/A	N/A	N/A	DEG
Phase − 5	0	−0.5315	N/A	N/A	N/A	N/A	DEG
Phase − 6	0	0.08743	N/A	N/A	N/A	N/A	DEG
Phase − 7	0	−0.3628	N/A	N/A	N/A	N/A	DEG

High resolution Integrated Logging Tool−DTS Wellsite Calibration − Sonde Error Correction
Master: 21−Jul−2007 17:20

R Sonde Error Correction − 0	0	−119.0	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction − 1	0	168.4	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction − 2	0	105.0	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction − 3	0	66.90	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction − 4	0	24.50	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction − 5	0	13.79	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction − 6	0	8.936	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction − 7	0	−1.189	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction − 0	0	−32.20	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction − 1	0	−197.3	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction − 2	0	−75.66	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction − 3	0	−64.46	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction − 4	0	−16.63	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction − 5	0	10.43	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction − 6	0	−2.144	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction − 7	0	10.52	N/A	N/A	N/A	N/A	MM/M

High resolution Integrated Logging Tool−DTS Wellsite Calibration − Mud Gain Correction
Master: 21−Jul−2007 17:20

Coarse − Mag, Real, Imag − 0	0	1.164	N/A	N/A	N/A	N/A	
Coarse − Mag, Real, Imag − 1	0	1.164	N/A	N/A	N/A	N/A	
Coarse − Mag, Real, Imag − 2	0	1.164	N/A	N/A	N/A	N/A	
Fine − Mag, Real, Imag − 0	0	1.162	N/A	N/A	N/A	N/A	
Fine − Mag, Real, Imag − 1	0	1.162	N/A	N/A	N/A	N/A	
Fine − Mag, Real, Imag − 2	0	1.162	N/A	N/A	N/A	N/A	

High resolution Integrated Logging Tool−DTS Wellsite Calibration − Stab Measurement Summary
Before: 28−Sep−2007 6:54

BS Window Ratio	0.7328	N/A	0.7343	N/A	N/A	N/A	
BS Window Sum	13770	N/A	13760	N/A	N/A	N/A	CPS
SS Window Ratio	0.5010	N/A	0.5007	N/A	N/A	N/A	
SS Window Sum	9642	N/A	9643	N/A	N/A	N/A	CPS
LS Window Ratio	0.2880	N/A	0.2890	N/A	N/A	N/A	
LS Window Sum	1217	N/A	1215	N/A	N/A	N/A	CPS

High resolution Integrated Logging Tool−DTS Wellsite Calibration − Photo−multiplier High Voltages Calibrations
Before: 28−Sep−2007 6:54

BS PM High Voltage (Command)	1396	N/A	1382	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1208	N/A	1214	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1433	N/A	1438	N/A	N/A	N/A	V

High resolution Integrated Logging Tool−DTS Wellsite Calibration − Crystal Quality Resolutions Calibration
Before: 28−Sep−2007 6:54

BS Crystal Resolution	11.24	N/A	11.08	N/A	N/A	N/A	%
SS Crystal Resolution	8.715	N/A	9.095	N/A	N/A	N/A	%
LS Crystal Resolution	9.082	N/A	8.914	N/A	N/A	N/A	%

High resolution Integrated Logging Tool−DTS Wellsite Calibration − MCFL Calibration
Before: 28−Sep−2007 6:55

Raw B0 Resistivity	3875	N/A	3847	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3780	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3792	N/A	N/A	N/A	OHMM

High resolution Integrated Logging Tool−DTS Wellsite Calibration − HILT Caliper Calibration
Before: 28−Sep−2007 6:46

HILT Caliper Zero Measurement	8.000	N/A	9.519	N/A	N/A	N/A	IN
HILT Caliper Plus Measurement	16.00	N/A	17.84	N/A	N/A	N/A	IN

High resolution Integrated Logging Tool−DTS Wellsite Calibration − Detector Calibration
Before: 28−Sep−2007 6:42

Gamma Ray Background	30.00	N/A	50.29	N/A	N/A	N/A	GAPI
Gamma Ray (Jig − Bkg)	185.4	N/A	185.4	N/A	N/A	16.86	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

High resolution Integrated Logging Tool−DTS Wellsite Calibration − Zero Measurement
Master: 13−Sep−2007 15:00 Before: 28−Sep−2007 6:43

CNTC Background	25.84	25.84	24.50	N/A	N/A	3.876	CPS
CFTC Background	28.13	28.13	25.27	N/A	N/A	4.220	CPS

High resolution Integrated Logging Tool−DTS Wellsite Calibration − Ratio Measurement
Master: 13−Sep−2007 15:00

Master: 13−Sep−2007 15:00							
Thermal Near Corr. (Tank)	5800	5357	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2400	2343	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.286	N/A	N/A	N/A	N/A	

High resolution Integrated Logging Tool−DTS Wellsite Calibration − Accelerometer Calibration

Before: 28−Sep−2007 13:19							
Z−Axis Acceleration	32.19	N/A	32.09	N/A	N/A	N/A	F/S2

High resolution Integrated Logging Tool−DTS Master Calibration − Inversion results

Master: 19−Sep−2007 20:04							
Rho Aluminum	2.596	2.598	−−	−−	−−	−−	G/C3
Rho Magnesium	1.686	1.688	−−	−−	−−	−−	G/C3
Pe Aluminum	2.570	2.596	−−	−−	−−	−−	
Pe Magnesium	2.650	2.596	−−	−−	−−	−−	

High resolution Integrated Logging Tool−DTS Master Calibration − Deviation Summary

Master: 19−Sep−2007 20:04							
BS Average Deviation	0	0.2310	−−	−−	−−	−−	%
BS Max Deviation	0	0.8873	−−	−−	−−	−−	%
SS Average Deviation	0	0.3318	−−	−−	−−	−−	%
SS Max Deviation	0	1.081	−−	−−	−−	−−	%
LS Average Deviation	0	0.7040	−−	−−	−−	−−	%
LS Max Deviation	0	1.809	−−	−−	−−	−−	%

Scintillation Gamma Ray Tool − N Wellsite Calibration − Detector Calibration

Before: 28−Sep−2007 7:26							
Gamma Ray (Jig − Bkg)	167.7	N/A	167.7	N/A	N/A	15.24	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

The GLS−VJ source activity is acceptable.

The HGNS Neutron Master Calibration was done with the following parameters :

NCT−B Water Temperature	79.0	DEGF.
Thermal Housing Size	3.375	IN.
NSR−F serial number	1329	

High resolution Integrated Logging Tool−DTS / Equipment Identification

Primary Equipment:

Array Induction Tool − H	AIT − H	
Rm/SP Bottom Nose	AHRM − A	
Array Induction Sonde	AHIS − BA	303
HILT high−Resolution Mechanical Sonde	HRMS − B	
HILT Rxo Gamma−ray Device	HRGD − B	
HILT Micro Cylindrically Focused Log Dev	MCFL −	
GR Logging Source	GLS − VJ	1885
HILT High Res. Control Cartridge	HRCC − B	

Auxiliary Equipment:

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Electronics Calibration Check − Thru Cal Mag. & Phase

Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Master	0.6375		0.6050	70.24		71.00
	Before	0.6421			71.21		
1	Master	1.308		1.270	69.12		70.00
	Before	1.318			70.09		
2	Master	0.6482		0.6230	65.65		66.00
	Before	0.6538			66.63		
3	Master	0.7317		0.7040	64.90		65.00
	Before	0.7377			65.88		
4	Master	1.374		1.337	58.79		59.00
	Before	1.385			59.81		

	Before	1.385			59.81		
5	Master	1.998	1.955		57.16	57.00	
	Before	2.014			58.20		
6	Master	1.996	1.955		57.17	57.00	
	Before	2.011			58.21		
7	Master	1.446	1.415		56.30	53.00	
	Before	1.460			57.53		
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)	Nom −60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)

Master: 21−Jul−2007 17:20 Before: 28−Sep−2007 6:43

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Electronics Calibration Check − Auxilliary

Phase	Array Induction SPA Plus MV	Value
Master		991.2
Before		992.6
	941.0 (Minimum) 990.5 (Nominal) 1040 (Maximum)	

Phase	Array Induction SPA Zero MV	Value
Master		−0.01815
Before		−0.07321
	−50.00 (Minimum) 0 (Nominal) 50.00 (Maximum)	

Phase	Array Induction Temperature Plus V	Value
Master		0.9180
Before		0.9192
	0.8700 (Minimum) 0.9150 (Nominal) 0.9600 (Maximum)	

Phase	Array Induction Temperature Zero V	Value
Master		−1.028E−00
Before		−6.897E−00
	−0.05000 (Minimum) 0 (Nominal) 0.05000 (Maximum)	

Master: 21−Jul−2007 17:20 Before: 28−Sep−2007 6:43

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Test Loop Gain Correction

Idx	Value	Test Loop Gain Magnitude V	Value	Phase DEG
0	1.012		0.4224	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
1	1.010		0.3222	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
2	1.007		0.2178	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
3	0.9994		0.7772	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
4	0.9885		0.04380	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
5	0.9844		−0.5315	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
6	0.9957		0.08743	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
7	1.003		−0.3628	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	

Master: 21−Jul−2007 17:20

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Sonde Error Correction

Idx	Value	R Sonde Error Correction MM/M	Value	X Sonde Error Correction MM/M
0	−119.0		−32.20	
	−231.0 (Minimum) −56.00 (Nominal) 119.0 (Maximum)		−2250 (Minimum) 0 (Nominal) 2250 (Maximum)	
1	168.4		−197.3	
	114.0 (Minimum) 159.0 (Nominal) 204.0 (Maximum)		−625.0 (Minimum) 0 (Nominal) 625.0 (Maximum)	

		(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)
2	105.0	66.00	111.0	156.0	−75.66	−350.0	0	350.0
3	66.90	39.00	64.00	89.00	−64.46	−250.0	0	250.0
4	24.50	15.00	25.00	35.00	−16.63	−63.00	0	63.00
5	13.79	4.000	14.00	24.00	10.43	−50.00	0	50.00
6	8.936	5.000	10.00	15.00	−2.144	−30.00	0	30.00
7	−1.189	−5.000	0	5.000	10.52	−30.00	0	30.00

Master: 21−Jul−2007 17:20

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Mud Gain Correction

Idx	Value	Coarse − Mag, Real, Imag			Value	Fine − Mag, Real, Imag		
0	1.164	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	1.162	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
1	1.164	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	1.162	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	1.164	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	1.162	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Master: 21−Jul−2007 17:20

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Stab Measurement Summary

Phase	BS Window Ratio			Value	Phase	SS Window Ratio			Value	Phase	LS Window Ratio			Value
Before				0.7343	Before				0.5007	Before				0.2890
	0.6962 (Minimum)	0.7328 (Nominal)	0.7694 (Maximum)			0.4760 (Minimum)	0.5010 (Nominal)	0.5261 (Maximum)			0.2736 (Minimum)	0.2880 (Nominal)	0.3024 (Maximum)	
Phase	BS Window Sum CPS			Value	Phase	SS Window Sum CPS			Value	Phase	LS Window Sum CPS			Value
Before				13760	Before				9643	Before				1215
	13080 (Minimum)	13770 (Nominal)	14460 (Maximum)			9160 (Minimum)	9642 (Nominal)	10120 (Maximum)			1156 (Minimum)	1217 (Nominal)	1278 (Maximum)	

Before: 28−Sep−2007 6:54

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Photo−multiplier High Voltages Calibrations

Phase	BS PM High Voltage (Command) V			Value	Phase	SS PM High Voltage (Command) V			Value	Phase	LS PM High Voltage (Command) V			Value
Before				1382	Before				1214	Before				1438
	1296 (Minimum)	1396 (Nominal)	1496 (Maximum)			1108 (Minimum)	1208 (Nominal)	1308 (Maximum)			1333 (Minimum)	1433 (Nominal)	1533 (Maximum)	

Before: 28−Sep−2007 6:54

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Crystal Quality Resolutions Calibration

Phase	BS Crystal Resolution %			Value	Phase	SS Crystal Resolution %			Value	Phase	LS Crystal Resolution %			Value
Before				11.08	Before				9.095	Before				8.914
	10.24 (Minimum)	11.24 (Nominal)	12.24 (Maximum)			7.715 (Minimum)	8.715 (Nominal)	9.715 (Maximum)			8.082 (Minimum)	9.082 (Nominal)	10.08 (Maximum)	

Before: 28−Sep−2007 6:54

High resolution Integrated Logging Tool−DTS Wellsite Calibration

MCFL Calibration

Phase	Raw B0 Resistivity OHMM			Value	Phase	Raw B1 Resistivity OHMM			Value	Phase	Raw B2 Resistivity OHMM			Value

Phase	Raw B1 Resistivity OHMM	Value	Phase	Raw B1 Resistivity OHMM	Value	Phase	Raw B2 Resistivity OHMM	Value
Before		3847	Before		3780	Before		3792
	3565 (Minimum) 3875 (Nominal) 4185 (Maximum)			3524 (Minimum) 3830 (Nominal) 4136 (Maximum)			3524 (Minimum) 3830 (Nominal) 4136 (Maximum)	

Before: 28−Sep−2007 6:55

High resolution Integrated Logging Tool−DTS Wellsite Calibration

HILT Caliper Calibration

Phase	HILT Caliper Zero Measurement IN	Value	Phase	HILT Caliper Plus Measurement IN	Value
Before		9.519	Before		17.84
	6.000 (Minimum) 8.000 (Nominal) 10.00 (Maximum)			12.00 (Minimum) 16.00 (Nominal) 20.00 (Maximum)	

Before: 28−Sep−2007 6:46

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig − Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		50.29	Before		185.4	Before		165.0
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)			168.6 (Minimum) 185.4 (Nominal) 202.3 (Maximum)			150.0 (Minimum) 165.0 (Nominal) 180.0 (Maximum)	

Before: 28−Sep−2007 6:42

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Zero Measurement

Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		25.84	Master		28.13
Before		24.50	Before		25.27
	5.000 (Minimum) 25.84 (Nominal) 40.00 (Maximum)			5.000 (Minimum) 28.13 (Nominal) 40.00 (Maximum)	

Master: 13−Sep−2007 15:00 Before: 28−Sep−2007 6:43

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Ratio Measurement

Phase	Thermal Near Corr. (Tank) CPS	Value	Phase	Thermal Far Corr. (Tank) CPS	Value	Phase	CNTC/CFTC (Tank)	Value
Master		5357	Master		2343	Master		2.286
	4700 (Minimum) 5800 (Nominal) 6900 (Maximum)			1900 (Minimum) 2400 (Nominal) 2900 (Maximum)			2.120 (Minimum) 2.159 (Nominal) 2.540 (Maximum)	

Master: 13−Sep−2007 15:00

High resolution Integrated Logging Tool−DTS
Wellsite Calibration

Accelerometer Calibration

Phase	Z−Axis Acceleration F/S2	Value
Before		32.09
	31.53 (Minimum) 32.19 (Nominal) 32.84 (Maximum)	

Before: 28−Sep−2007 13:19

High resolution Integrated Logging Tool−DTS Master Calibration

Electronics Calibration Check − Thru Cal Mag. & Phase

Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Master	0.6375		0.6050	70.24		71.00
1	Master	1.308		1.270	69.12		70.00
2	Master	0.6482		0.6230	65.65		66.00
3	Master	0.7317		0.7040	64.90		65.00
4	Master	1.374		1.337	58.79		59.00
5	Master	1.998		1.955	57.16		57.00
6	Master	1.996		1.955	57.17		57.00
7	Master	1.446		1.415	56.30		53.00
		60.00 % (Minimum) (Nominal) 140.0 % (Maximum)			Nom −60.00 (Minimum) (Nominal) Nom + 60.00 (Maximum)		

Master: 21−Jul−2007 17:20

High resolution Integrated Logging Tool−DTS Master Calibration

Electronics Calibration Check − Auxilliary

Phase	Array Induction SPA Plus MV	Value
Master		991.2
	941.0 (Minimum) 990.5 (Nominal) 1040 (Maximum)	

Phase	Array Induction SPA Zero MV	Value
Master		−0.01815
	−50.00 (Minimum) 0 (Nominal) 50.00 (Maximum)	

Phase	Array Induction Temperature Plus V	Value
Master		0.9180
	0.8700 (Minimum) 0.9150 (Nominal) 0.9600 (Maximum)	

Phase	Array Induction Temperature Zero V	Value
Master		−1.028E−00
	−0.05000 (Minimum) 0 (Nominal) 0.05000 (Maximum)	

Master: 21−Jul−2007 17:20

High resolution Integrated Logging Tool−DTS Master Calibration

Test Loop Gain Correction

Idx	Value	Test Loop Gain Magnitude V	Value	Phase DEG
0	1.012		0.4224	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
1	1.010		0.3222	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
2	1.007		0.2178	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
3	0.9994		0.7772	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
4	0.9885		0.04380	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
5	0.9844		−0.5315	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
6	0.9957		0.08743	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	
7	1.003		−0.3628	
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		−3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)	

Master: 21−Jul−2007 17:20

High resolution Integrated Logging Tool−DTS Master Calibration

Sonde Error Correction

Idx	Value	R Sonde Error Correction MM/M	Value	X Sonde Error Correction MM/M
0	−119.0		−32.20	
	−231.0 (Minimum) −56.00 (Nominal) 119.0 (Maximum)		−2250 (Minimum) 0 (Nominal) 2250 (Maximum)	
1	168.4		−197.3	
	114.0 (Minimum) 159.0 (Nominal) 204.0 (Maximum)		−625.0 (Minimum) 0 (Nominal) 625.0 (Maximum)	
2	105.0		−75.66	
	66.00 (Minimum) 111.0 (Nominal) 156.0 (Maximum)		−350.0 (Minimum) 0 (Nominal) 350.0 (Maximum)	
3	66.90		−64.46	
	39.00 (Minimum) 64.00 (Nominal) 89.00 (Maximum)		−250.0 (Minimum) 0 (Nominal) 250.0 (Maximum)	
4	24.50		−16.63	
	15.00 (Minimum) 25.00 (Nominal) 35.00 (Maximum)		−63.00 (Minimum) 0 (Nominal) 63.00 (Maximum)	
5	13.79		10.43	
	4.000 (Minimum) 14.00 (Nominal) 24.00 (Maximum)		−50.00 (Minimum) 0 (Nominal) 50.00 (Maximum)	
6	8.936		−2.144	
	5.000 (Minimum) 10.00 (Nominal) 15.00 (Maximum)		−30.00 (Minimum) 0 (Nominal) 30.00 (Maximum)	

	(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)
7	−1.189				10.52		
	−5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)		−30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)

Master: 21−Jul−2007 17:20

High resolution Integrated Logging Tool−DTS Master Calibration

Mud Gain Correction

Idx	Value	Coarse − Mag, Real, Imag			Value	Fine − Mag, Real, Imag		
0	1.164				1.162			
	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
1	1.164				1.162			
	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	1.164				1.162			
	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Master: 21−Jul−2007 17:20

High resolution Integrated Logging Tool−DTS Master Calibration

Inversion results

Phase	Rho Aluminum G/C3	Value	Phase	Rho Magnesium G/C3	Value
Master		2.598	Master		1.688
2.586 (Minimum)	2.596 (Nominal)	2.606 (Maximum)	1.676 (Minimum)	1.686 (Nominal)	1.696 (Maximum)

Phase	Pe Aluminum	Value	Phase	Pe Magnesium	Value
Master		2.596	Master		2.596
2.470 (Minimum)	2.570 (Nominal)	2.670 (Maximum)	2.550 (Minimum)	2.650 (Nominal)	2.750 (Maximum)

Master: 19−Sep−2007 20:04

High resolution Integrated Logging Tool−DTS Master Calibration

Deviation Summary

Phase	BS Average Deviation %	Value	Phase	SS Average Deviation %	Value	Phase	LS Average Deviation %	Value
Master		0.2310	Master		0.3318	Master		0.7040
−0.6000 (Minimum)	0 (Nominal)	0.6000 (Maximum)	−1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)	−1.500 (Minimum)	0 (Nominal)	1.500 (Maximum)

Phase	BS Max Deviation %	Value	Phase	SS Max Deviation %	Value	Phase	LS Max Deviation %	Value
Master		0.8873	Master		1.081	Master		1.809
−1.600 (Minimum)	0 (Nominal)	1.600 (Maximum)	−2.500 (Minimum)	0 (Nominal)	2.500 (Maximum)	−3.500 (Minimum)	0 (Nominal)	3.500 (Maximum)

Master: 19−Sep−2007 20:04

High resolution Integrated Logging Tool−DTS Master Calibration

Zero Measurement

Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		25.84	Master		28.13
5.000 (Minimum)	25.84 (Nominal)	40.00 (Maximum)	5.000 (Minimum)	28.13 (Nominal)	40.00 (Maximum)

Master: 13−Sep−2007 15:00

High resolution Integrated Logging Tool−DTS Master Calibration

Tank Measurement

Phase	Thermal Near Corr. (Tank) CPS	Value	Phase	Thermal Far Corr. (Tank) CPS	Value	Phase	CNTC/CFTC (Tank)	Value
Master		5357	Master		2343	Master		2.286
4700 (Minimum)	5800 (Nominal)	6900 (Maximum)	1900 (Minimum)	2400 (Nominal)	2900 (Maximum)	2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)

Master: 13−Sep−2007 15:00

Elemental Capture Cartridge − A / Equipment Identification

Primary Equipment:
ECC Cartridge — ECC − A

Auxiliary Equipment:

ECC Housing	ECH − A

Scintillation Gamma Ray Tool − N / Equipment Identification

Primary Equipment:	
Scintillation Gamma Cartridge	SGC − TB
Scintillation Gamma Detector	SGD − TAB
Auxiliary Equipment:	
Scintillation Gamma Housing	SGH − K
Gamma Source Radioactive	GSR − U/Y

Scintillation Gamma Ray Tool − N Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI			Value	Phase	Gamma Ray (Jig − Bkg) GAPI			Value	Phase	Gamma Ray (Calibrated) GAPI			Value
Before				46.99	Before				167.7	Before				165.0
0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)			152.4 (Minimum)	167.7 (Nominal)	182.9 (Maximum)			150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)		

Before: 28−Sep−2007 7:26

DTS Telemetry Tool / Equipment Identification

Primary Equipment:	
DTC−H Auxiliary Cartridge	DTCH − A
DTC−H Telemetry Cartridge	DTCH − A
Auxiliary Equipment:	
DTCH Telemetry Cartridge Housing	ECH − KC

Input DLIS Files

DEFAULT	**AIT_TLD_MCFL_CNL_011LUP**	**FN:10**	**PRODUCER**	**28−Sep−2007 13:58**	**1866.0 FT**	**200.0 FT**

Output DLIS Files

DEFAULT	**AIT_TLD_MCFL_CNL_013PUP**	**FN:12**	**PRODUCER**	**28−Sep−2007 15:14**	**1866.0 FT**	**206.5 FT**

Integrated Hole/Cement Volume Summary

Hole Volume = 554.93 F3

Cement Volume = 340.86 F3 (assuming 5.50 IN casing O.D.)

Computed from 1856.0 FT to 559.0 FT using data channel(s) HCAL

OP System Version: 15C0−309

MCM

HILTB−FTB	**SRPC−3402−Q3_2007**	**ECS−A**	**15C0−309**
ECC−A	**15C0−309**	**SGT−N**	**15C0−309**
DTC−H	**15C0−309**		

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

Gamma Ray Backup From RHT1 to GR_1

SP (SP)
−160 (MV) 40

AIT−H 60 Inch Investigation (AHF60)
0 (OHMM) 100

Gamma Ray (GR)
150 (GAPI) 300

Cable Drag From STIA to STIT

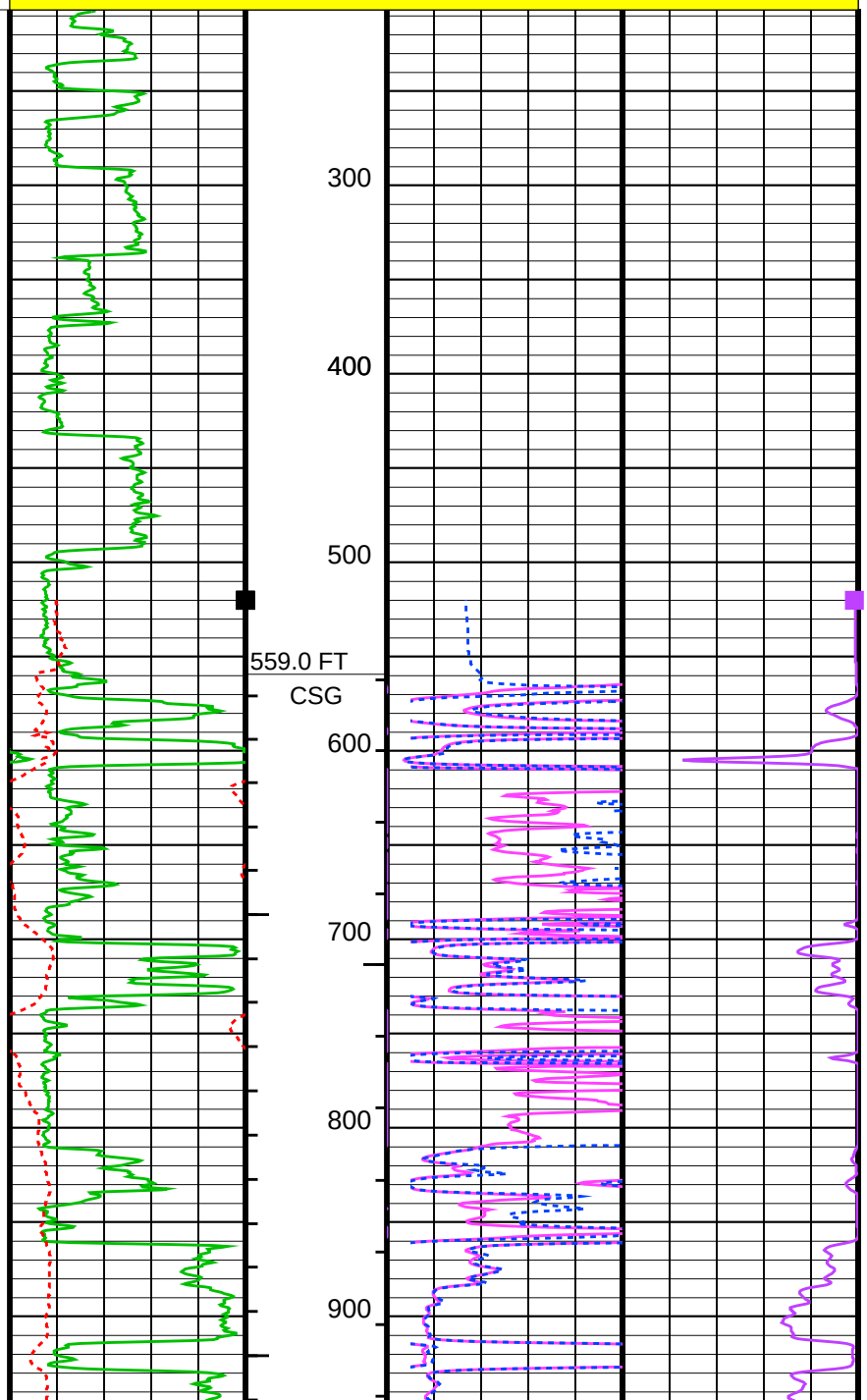
AIT−H 20 Inch Investigation (AHF20)
0 (OHMM) 100

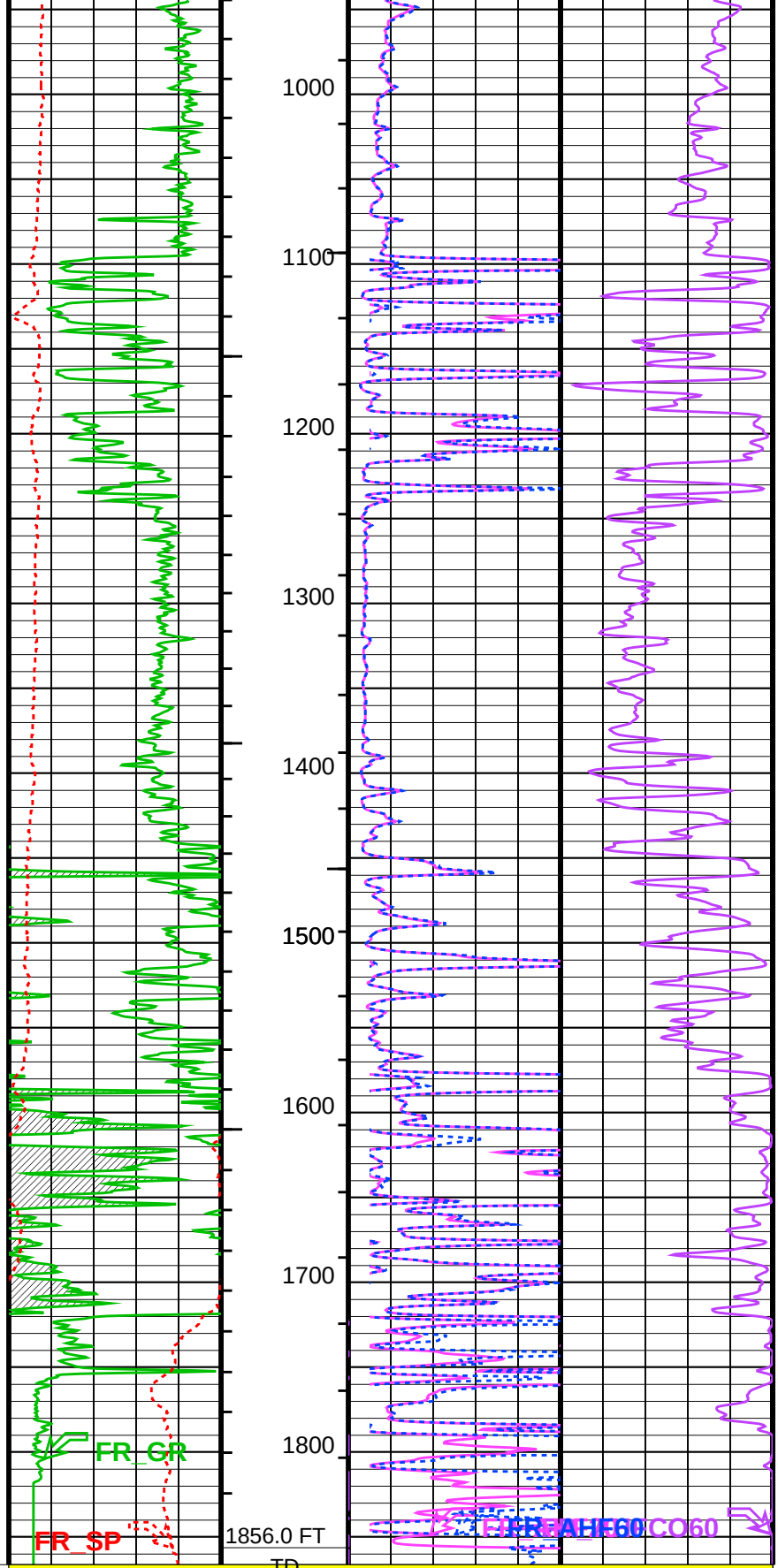
Gamma Ray (GR)
0 (GAPI) 150

Stuck Stretch (STIT)
0 (F) 50

AIT−H 60 Inch Investigation Conductivity (AHFCO60)
400 (MM/M) 0

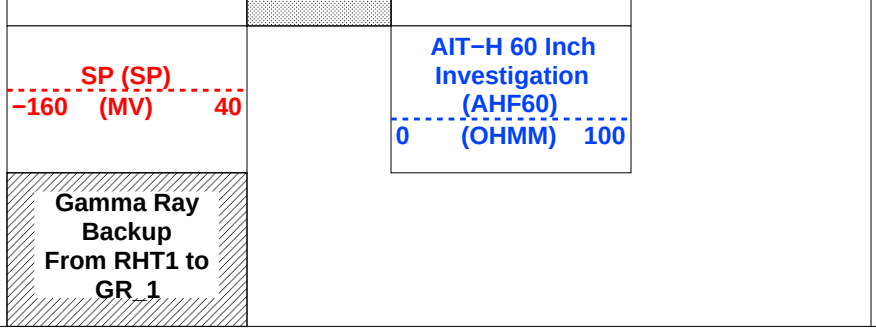
CORRELATION 1"=100FT





CORRELATION 1"=100FT

Gamma Ray (GR) 0 (GAPI) 150	Stuck Stretch (STIT) 0 (F) 50	AIT−H 60 Inch Investigation Conductivity (AHFCO60) 400 (MM/M) 0
Gamma Ray (GR) 150 (GAPI) 300	Cable Drag From STIA to STIT	AIT−H 20 Inch Investigation (AHF20) 0 (OHMM) 100



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	
	HILTB−FTB: High resolution Integrated Logging Tool−DTS		
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	1.5	IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
BHT	Bottom Hole Temperature (used in calculations)	89	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
SPNV	SP Next Value	0	MV
	SGT−N: Scintillation Gamma Ray Tool − N		
BHT	Bottom Hole Temperature (used in calculations)	89	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)	89	DEGF
FCD	Future Casing (Outer) Diameter	5.5	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	HCAL	
SHT	Surface Hole Temperature	68	DEGF
	STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth − Driller	1859.00	FT
TDL	Total Depth − Logger	1856.00	FT
	System and Miscellaneous		
BS	Bit Size	8.750	IN
DFD	Drilling Fluid Density	9.00	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
FLEV	Fluid Level	−50000.00	FT
MST	Mud Sample Temperature	88.39	DEGF
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	1856	FT

OP System Version: 15C0−309

MCM

HILTB−FTB	**SRPC−3402−Q3_2007**	**ECS−A**	**15C0−309**
ECC−A	**15C0−309**	**SGT−N**	**15C0−309**
DTC−H	**15C0−309**		

Input DLIS Files

DEFAULT	**AIT_TLD_MCFL_CNL_011LUP**	**FN:10**	**PRODUCER**	**28−Sep−2007 13:58**	**1866.0 FT**	**200.0 FT**

Output DLIS Files

DEFAULT	**AIT_TLD_MCFL_CNL_013PUP**	**FN:12**	**PRODUCER**	**28−Sep−2007 15:14**

Company: **STORM CAT ENERGY (USA) OPERATING CORP**

Schlumberger

Well: **FILES 1−12H**
Field: **B−43**
County: **VAN BUREN**
State: **ARKANSAS**

PLATFORM EXPRESS
ARRAY INDUCTION/ GAMMA RAY
LITHO−DENSITY/ COMPENSATED NEUTRON