

COMPANY: Lamont Doherty

WELL: ODP Leg 189, Site 1170 (WSTR-2A)

FIELD: Tasmanian Seaway, West Tasmania Site

COUNTRY: Offshore STATE: Indian Ocean

Geological High Sensitivity
Magnetic Log



COUNTY: Offshore
Field: Tasmanian Seaway, West Tasm
Location: ODP Leg 189, Site 1170 (WSTR-
Company: Lamont Doherty

LOCATION		Elev.:	K.B.	11.2 M
Permanent Datum:	MSL		G.L.	-2716 M
Log Measured From:	RKB		D.F.	10.9 M
Drilling Measured From:	RKB	Elev.: 0 ft		
				11.2 M above Perm. Datum
API Serial No.	LATITUDE: 47° 9.06' S	LONGITUDE: 146° 2.98' E	RIG:	JOIDES Resolution

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			
PH			
Source Of Sample			
RM @ Measured Temperature			
RMF @ Measured Temperature			
RMC @ Measured Temperature			
Source RMF			
RM @ MRT			
RMF @ MRT			
Maximum Recorded Temperatures			
Circulation Stopped			
Time			
Logger On Bottom			
Time			
Unit Number			
Location			
Recorded By			
Witnessed By			

Logging Date 10-APR-2000

Run Number One

Depth Driller 3496 M

Schlumberger Depth 3497.5 M

Bottom Log Interval 3490 M

Top Log Interval 3245 M

Casing Driller Size @ Depth 0.000 in @ 3249 M

Casing Schlumberger 3245 M

Bit Size 9.875 in

Type Fluid In Hole Salt Water Base

Density 8.51234 lbrn/gal

Fluid Loss PH

Source Of Sample Salt water

RM @ Measured Temperature 0.230 ohm.m @ 60 degF

RMF @ Measured Temperature @ @

RMC @ Measured Temperature @ @

Source RMF RMC @ @

RM @ MRT 2.268 @ 0 @ 0

RMF @ MRT 25.8 degC @ 0

Maximum Recorded Temperatures 9-APR-2000 16:00

Circulation Stopped 10-APR-2000 13:20

Logger On Bottom 99 Houston OS

Unit Number Kerry M. Swain

Recorded By Patrick Fothergill, Ulysses S. Nimmemann

Witnessed By

ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO CLAUSE 4 OF OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.





OTHER SERVICES1 OS1: DSI/FMS OS2: DITE/HLDS/APS/HNGS OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
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REMARKS: RUN NUMBER 1 Hole cored with APC/XCB. Sea Floor at 2715.8 MBRF (Driller), Logger depth of sea floor not found. Log presented in meters below rig floor. Lamont Temperature Tool (TAP) run on DITE/HLDS/APS/HNGS only. Toolstring -GHMT/NGTC/DSST Wireline heave compensator (WHC) used on all descents. Sepiolite mud was used to displace the borehole. Drillers TD- 3496 mbrf. Loggers TD- 3497.5 mbrf. Drill pipe Logger- 3245 mbrf. Drill pipe Driller - 3249 mbrf. GHMT spike at 3314 mbrf. GHMT jumper setting #1.	REMARKS: RUN NUMBER 2
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RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:	9C1-303		PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1		RUN 2	
SURFACE EQUIPMENT			
GSR-U			
WITM (DTS)-A			

DOWNHOLE EQUIPMENT			
LEH-QT			32.09
LEH-QT			
DTC-H	CTEM		30.92
ECH-KC 8253	TelStatus		31.20
	ToolStatu		30.29
AH-CMEAY			30.29
AH-CMEAY 765			

DSST-B 29.00
 SPAC-B 18
 ECH-SD 18
 SMDR-BD 8070
 SSIJ-BA 65
 SMDX-AA 8026

PWF 13.45

AH-CMEAY 13.45
 AH-CMEAY 764

DTA-A 12.16
 ECH-KE 8261
 DTA-A 8261

Detector 10.56 10.94

NGT-C
 NGD-A 1736
 NGH-B 3
 NGC-C 1921
 NGCH-A 752

GHMT-A 8.33
 GHMC-B 701
 ECH-MBA 701
 NMTE-C 703
 SUMS-B 702
 NMRS-C 702

SUMS 4.08

NMRS 1.07

BNS-CCS 0.14
 STATUS HV DF
 Tension
 TOOL ZERO 0.00

MAXIMUM STRING DIAMETER 4.00 IN
 MEASUREMENTS RELATIVE TO TOOL ZERO
 ALL LENGTHS IN METERS



Output DLIS Files

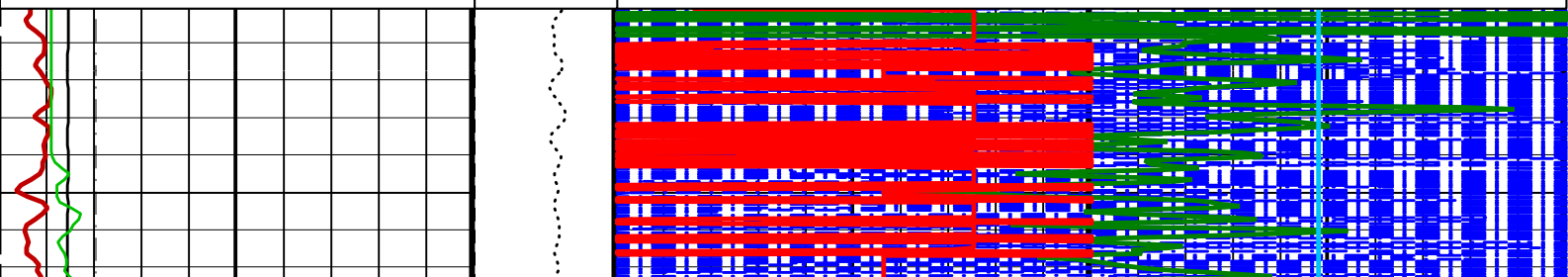
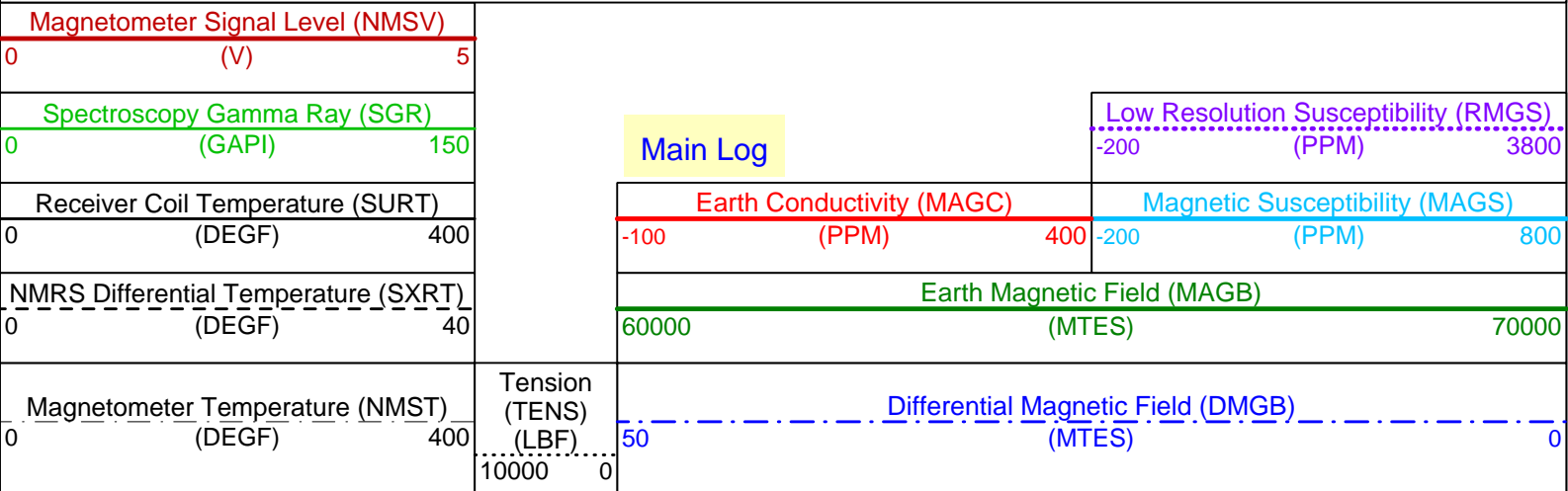
DEFAULT	GHMT .025	FN:22 PRODUCER	10-Apr-2000 06:57	3493.2 M	3225.1 M
GHMTDSI_CUST	GHMT .025	FN:23 PRODUCER	10-Apr-2000 06:57	3493.2 M	3225.0 M

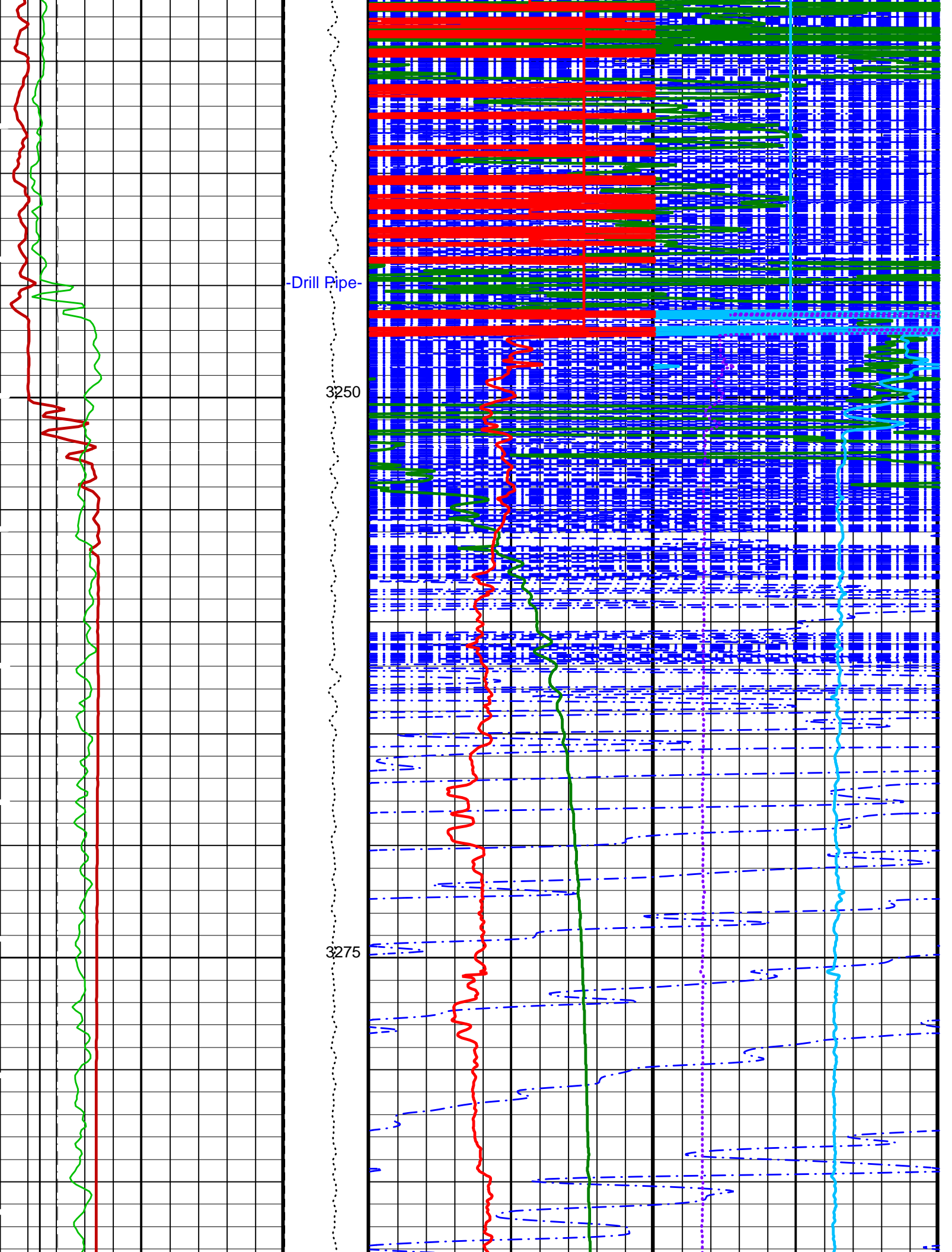
OP System Version: 9C1-303 MCM

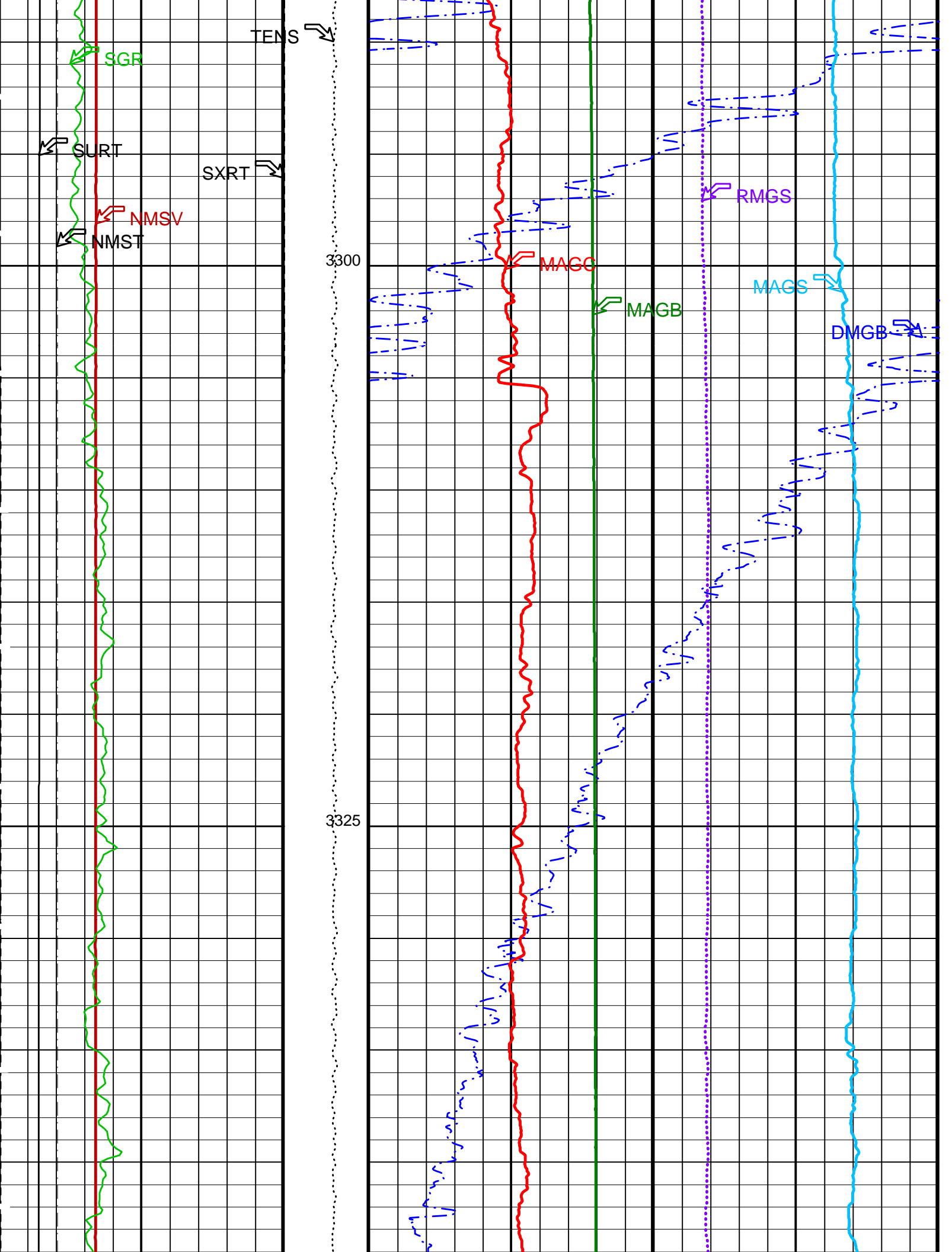
GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

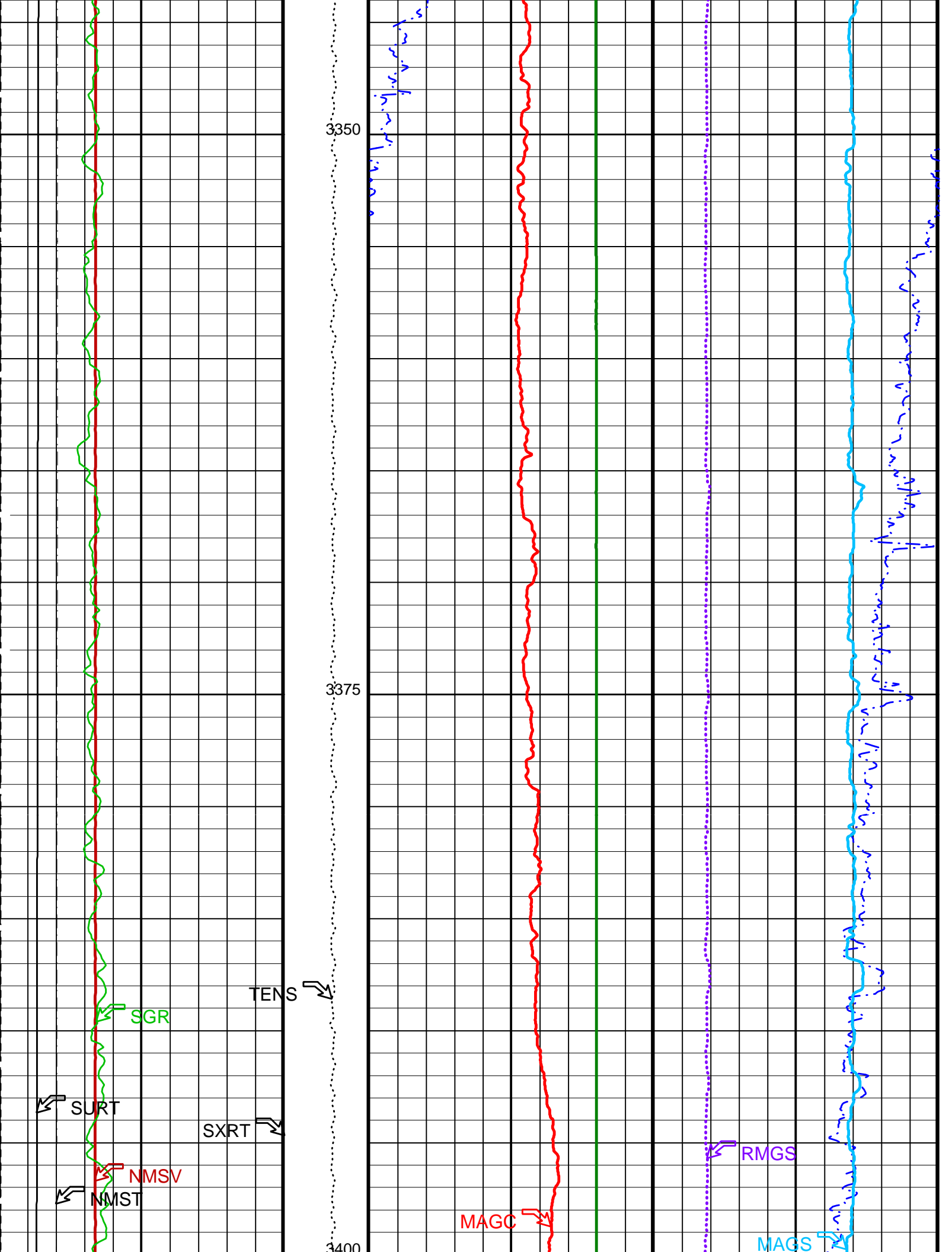
PIP SUMMARY

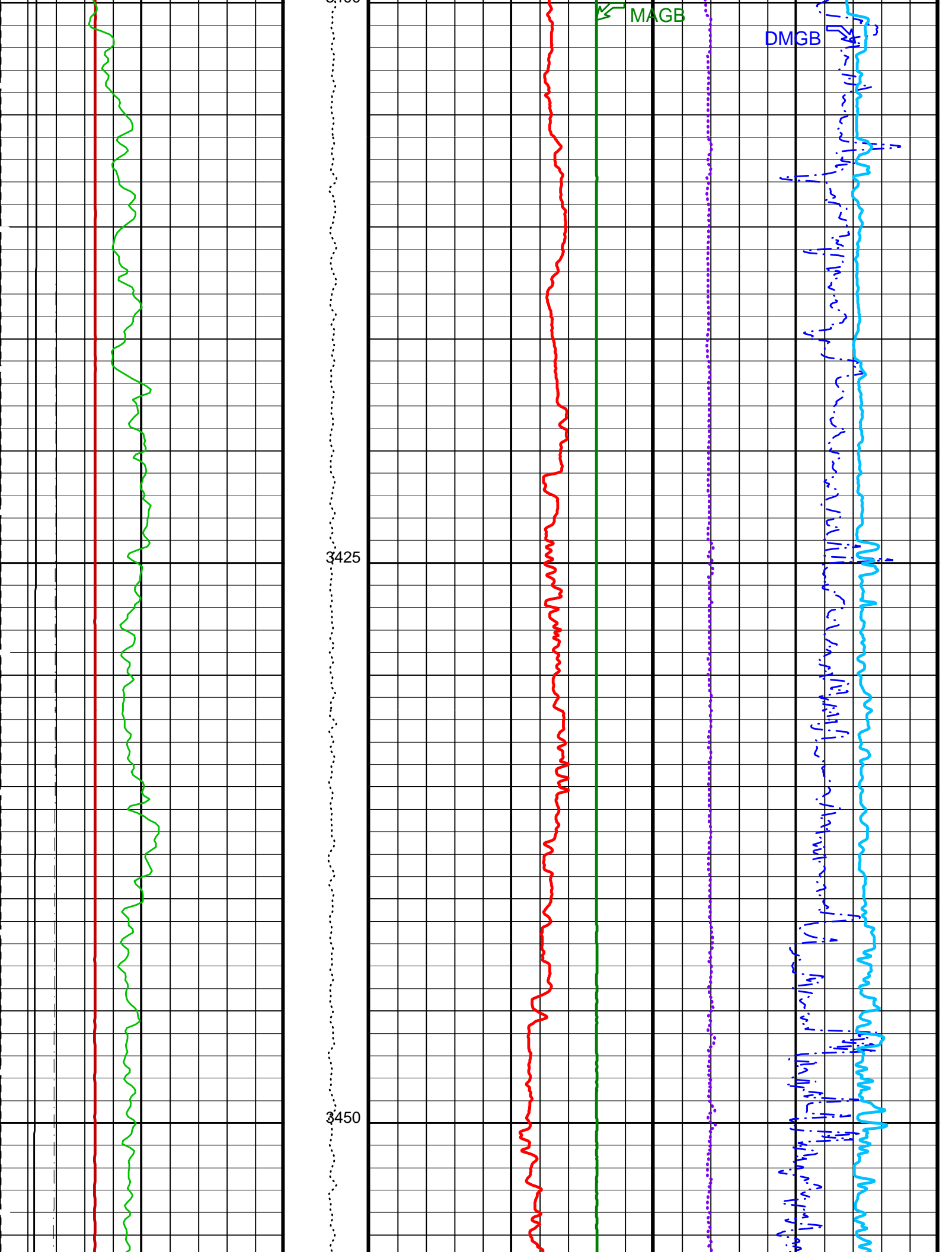
▶ Time Mark Every 60 S

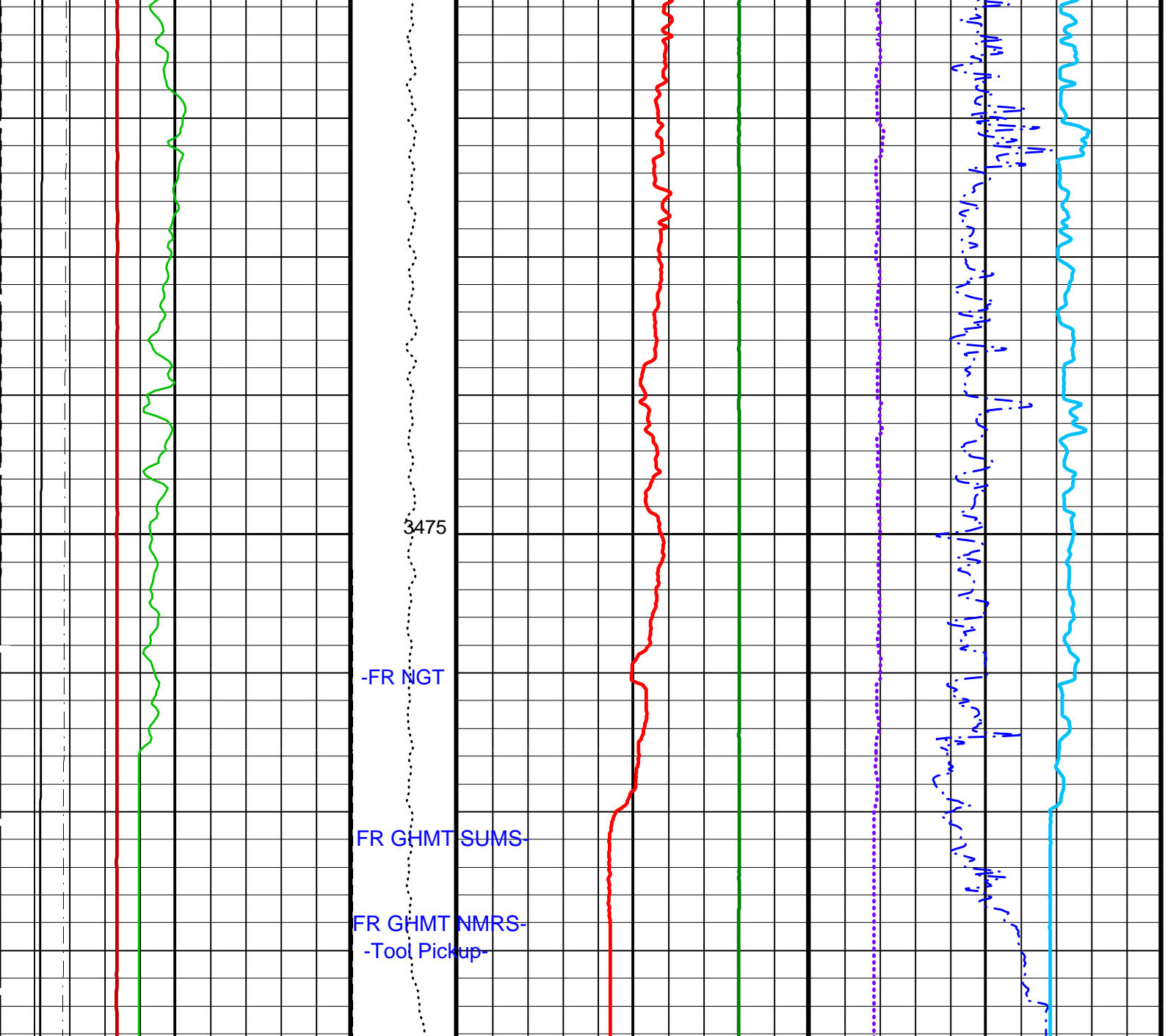












Magnetometer Temperature (NMST) (DEGF)	0	400	Tension (TENS) (LBF)		50	0	Differential Magnetic Field (DMGB) (MTES)		0
NMRS Differential Temperature (SXRT) (DEGF)	0	40	Earth Magnetic Field (MAGB) (MTES)		60000	70000	Earth Conductivity (MAGC) (PPM)		400
Receiver Coil Temperature (SURT) (DEGF)	0	400	Magnetic Susceptibility (MAGS) (PPM)		-200	800	Low Resolution Susceptibility (RMGS) (PPM)		3800
Spectroscopy Gamma Ray (SGR) (GAPI)	0	150	Main Log						
Magnetometer Signal Level (NMSV) (V)	0	5							

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
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BS	Bit Size	9.875	IN
CBAR	Constant Barite	1	
CGMI	Spectro Computed Gamma Ray Minimum	0	GAPI
CGSH	Spectro Computed Gamma Ray Shale	100	GAPI
DFD	Drilling Fluid Density	8.51	LB/G
KMIN	Potassium Minimum	0	
KSHA	Potassium Shale	0.02	
MAGR	Reference Earth Magnetic Field	64163	MTES
NFO	NGT Filtering Option	KALMAN	
PMUD	Potassium Mud	0	%
SGMI	Spectro Gamma Ray Minimum	0	GAPI
SGSH	Spectro Gamma Ray Shale	100	GAPI
TMIN	Thorium Minimum	0	PPM
TSHA	Thorium Shale	12	PPM
UMIN	Uranium Minimum	0	PPM
USHA	Uranium Shale	3	PPM

Format: GHMT Vertical Scale: 1:200 Graphics File Created: 10-Apr-2000 06:57

OP System Version: 9C1-303 MCM

GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

Output DLIS Files

DEFAULT	GHMT .025	FN:22	PRODUCER	10-Apr-2000 06:57
GHMTDSI_CUST	GHMT .025	FN:23	PRODUCER	10-Apr-2000 06:57

Output DLIS Files

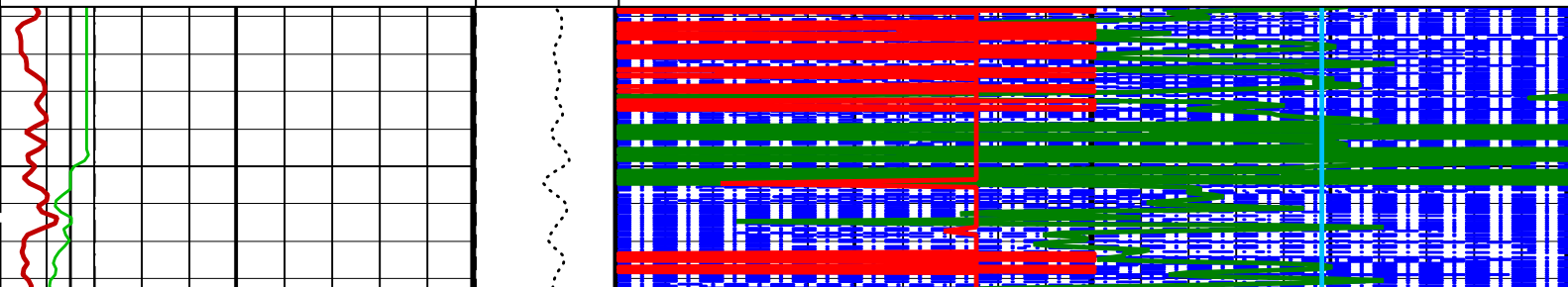
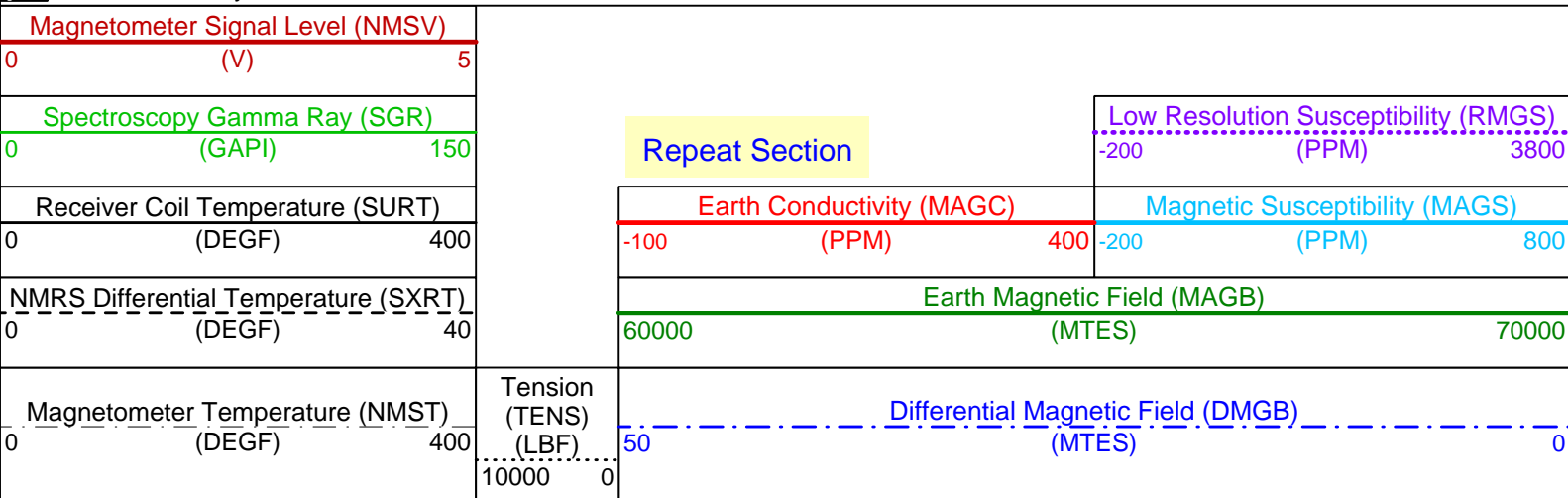
DEFAULT	GHMT .026	FN:24	PRODUCER	10-Apr-2000 07:53	3345.2 M	3230.7 M
GHMTDSI_CUST	GHMT .026	FN:25	PRODUCER	10-Apr-2000 07:53	3345.2 M	3230.7 M

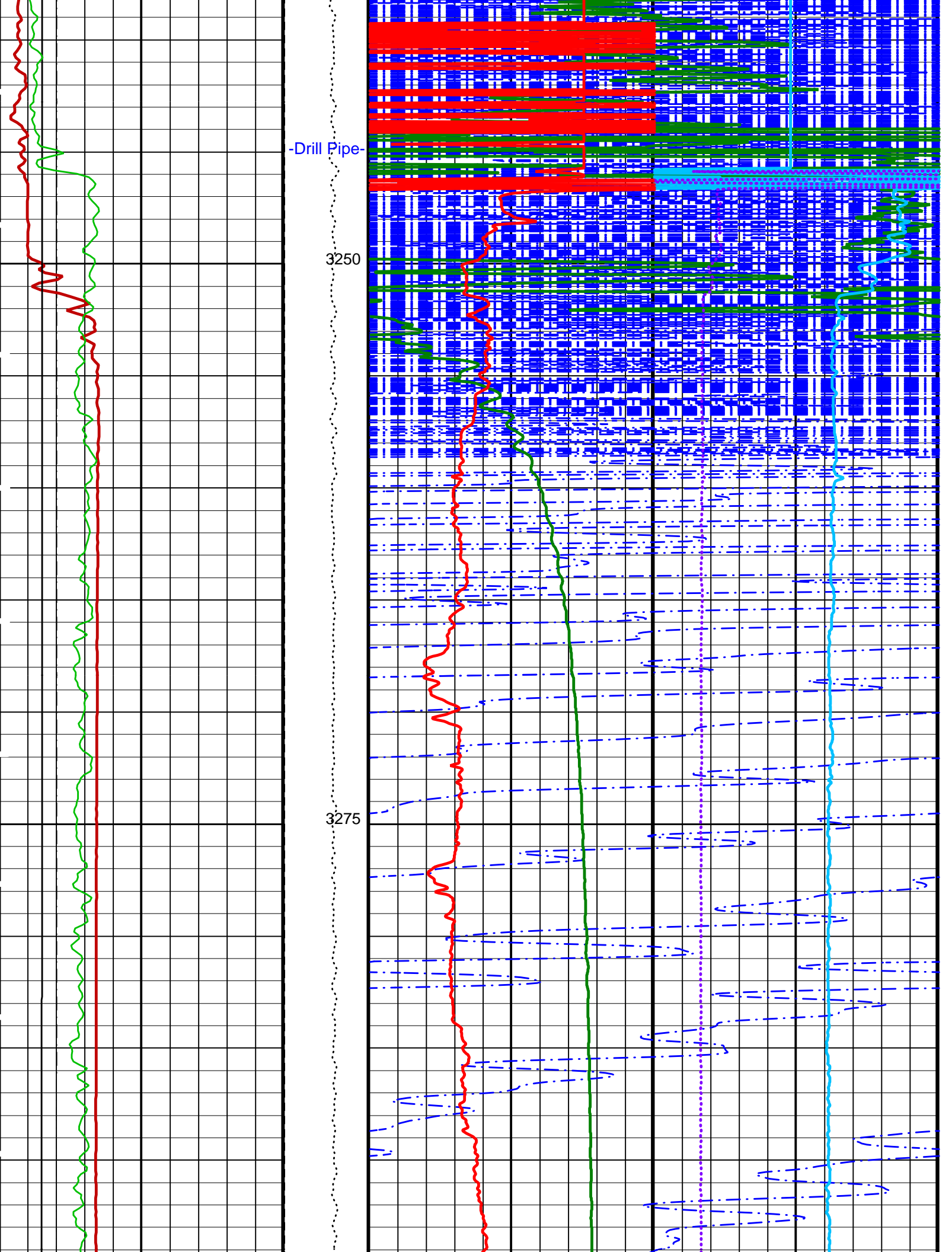
OP System Version: 9C1-303 MCM

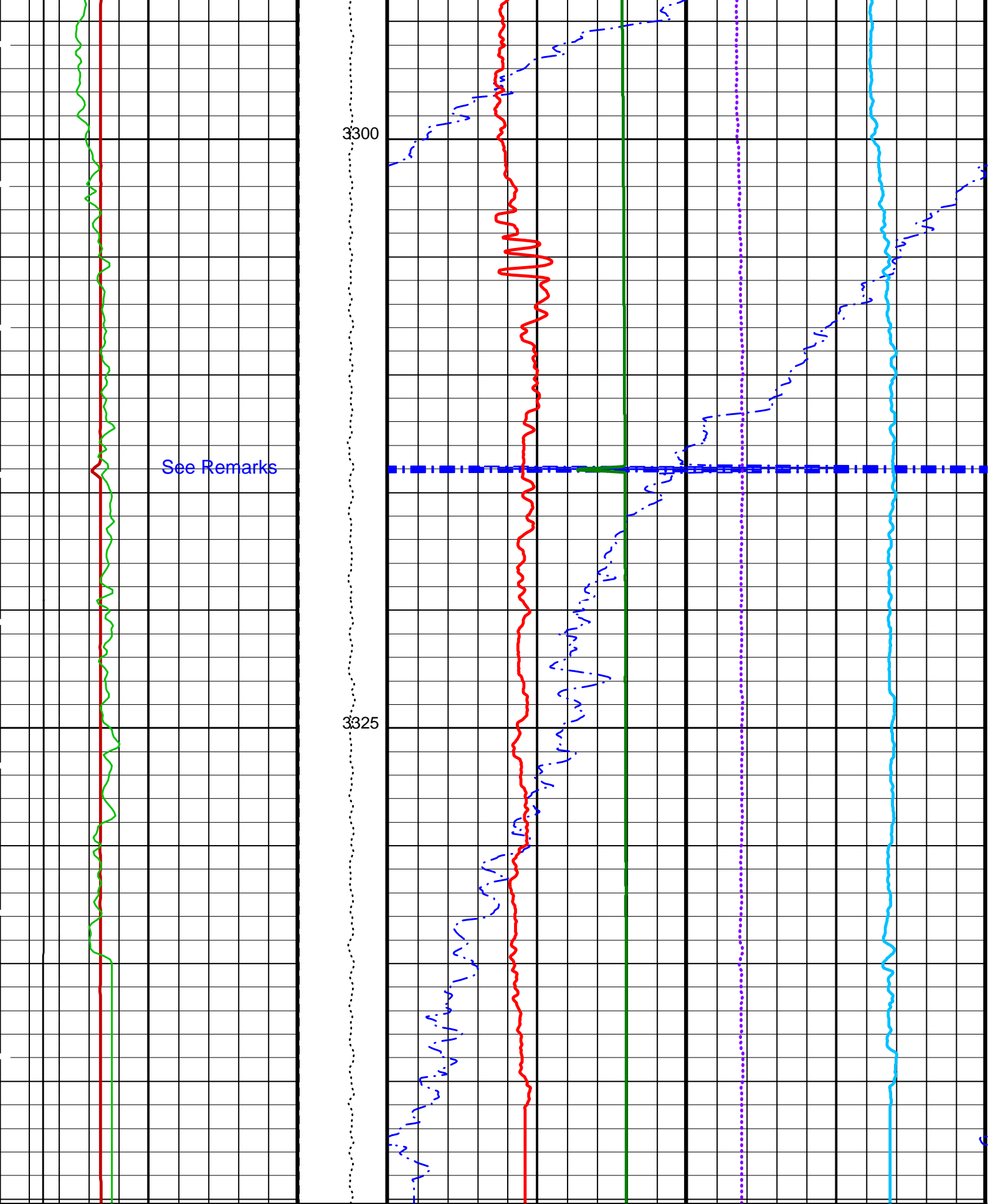
GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

PIP SUMMARY

Time Mark Every 60 S







Magnetometer Temperature (NMST) (DEGF)	Tension (TENS) (LBF)	Differential Magnetic Field (DMGB) (MTES)
0 400	10000 0	50 0

NMRS Differential Temperature (SXRT)	Earth Magnetic Field (MAGB)
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(DEGF)	40	60000	(MTES)	70000
Receiver Coil Temperature (SURT)		Earth Conductivity (MAGC)		Magnetic Susceptibility (MAGS)
0 (DEGF)	400	-100 (PPM)	400	-200 (PPM) 800
Spectroscopy Gamma Ray (SGR)		Repeat Section		Low Resolution Susceptibility (RMGS)
0 (GAPI)	150			-200 (PPM)
Magnetometer Signal Level (NMSV)				
0 (V)	5			

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
BS	Bit Size	9.875	IN
CBAR	Constant Barite	1	
CGMI	Spectro Computed Gamma Ray Minimum	0	GAPI
CGSH	Spectro Computed Gamma Ray Shale	100	GAPI
DFD	Drilling Fluid Density	8.51	LB/G
KMIN	Potassium Minimum	0	
KSHA	Potassium Shale	0.02	
MAGR	Reference Earth Magnetic Field	64163	MTES
NFO	NGT Filtering Option	KALMAN	
PMUD	Potassium Mud	0	%
SGMI	Spectro Gamma Ray Minimum	0	GAPI
SGSH	Spectro Gamma Ray Shale	100	GAPI
TMIN	Thorium Minimum	0	PPM
TSHA	Thorium Shale	12	PPM
UMIN	Uranium Minimum	0	PPM
USHA	Uranium Shale	3	PPM

Format: GHMT Vertical Scale: 1:200 Graphics File Created: 10-Apr-2000 07:53

OP System Version: 9C1-303
MCM

GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

Output DLIS Files

DEFAULT	GHMT .026	FN:24 PRODUCER	10-Apr-2000 07:53
GHMTDSI_CUST	GHMT .026	FN:25 PRODUCER	10-Apr-2000 07:53

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Natural Gamma Spectroscopy - C Wellsite Calibration - Background Measurement							
Master: Calibration out of date 6-JAN-2000 4:01 Before: 18-MAR-2000 8:16							
WINDOW 1 Background	100.0	11.24	12.46	N/A	N/A	100.0	CPS
WINDOW 2 Background	50.00	2.775	3.522	N/A	N/A	50.00	CPS
WINDOW 3 Background	10.00	0.8498	0.9159	N/A	N/A	10.00	CPS
WINDOW 4 Background	6.000	0.3150	0.3186	N/A	N/A	6.000	CPS
WINDOW 5 Background	10.00	0.4801	0.4875	N/A	N/A	10.00	CPS
SGR Background	30.00	4.096	4.631	N/A	N/A	N/A	GAPI
Natural Gamma Spectroscopy - C Wellsite Calibration - Normalized Jig Measurement							
Master: Calibration out of date 6-JAN-2000 3:55 Before: 18-MAR-2000 8:21							
WINDOW 1 Jig	376.0	383.7	380.7	N/A	N/A	22.56	CPS
WINDOW 2 Jig	167.0	168.9	168.6	N/A	N/A	10.02	CPS
WINDOW 3 Jig	24.00	23.84	23.73	N/A	N/A	1.440	CPS
WINDOW 4 Jig	14.00	13.72	13.77	N/A	N/A	2.800	CPS
WINDOW 5 Jig	22.50	22.02	22.83	N/A	N/A	4.500	CPS
SGR Jig	160.0	160.7	160.0	N/A	N/A	7.000	GAPI

Natural Gamma Spectroscopy - C Master Calibration - Master Quality Control Values
Master: Calibration out of date 6-JAN-2000 3:52

Photomultiplier Res. CARC3	8.000	9.090	--	--	--	--	CPS
APU WINDOW Jig	1350	963.1	--	--	--	--	CPS
APL WINDOW Jig	1350	962.8	--	--	--	--	CPS

The NGT PCSL Value is set to 83.674 KEV





Natural Gamma Spectroscopy - C / Equipment Identification			
Primary Equipment:			
NGT Cartridge	NGC - C	1921	
NGT Sonde	NGD - A	1736	
Auxiliary Equipment:			
NGT Cartridge Housing	NGCH - A	752	
NGT Sonde Housing	NGH - B	3	
Gamma Source Radioactive	GSR - U		

Natural Gamma Spectroscopy - C Wellsite Calibration								
Background Measurement								
Phase	WINDOW 1 Background CPS	Value	Phase	WINDOW 2 Background CPS	Value	Phase	WINDOW 3 Background CPS	Value
Master		11.24	Master		2.775	Master		0.8498
Before		12.46	Before		3.522	Before		0.9159
	0 (Minimum) 100.0 (Nominal) 400.0 (Maximum)			0 (Minimum) 50.00 (Nominal) 200.0 (Maximum)			0 (Minimum) 10.00 (Nominal) 40.00 (Maximum)	
Phase	WINDOW 4 Background CPS	Value	Phase	WINDOW 5 Background CPS	Value	Phase	SGR Background GAPI	Value
Master		0.3150	Master		0.4801	Master		4.096
Before		0.3186	Before		0.4875	Before		4.631
	0 (Minimum) 6.000 (Nominal) 24.00 (Maximum)			0 (Minimum) 10.00 (Nominal) 40.00 (Maximum)			0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)	
Master: Calibration out of date 6-JAN-2000 4:01			Before: 18-MAR-2000 8:16					

Natural Gamma Spectroscopy - C Wellsite Calibration								
Normalized Jig Measurement								
Phase	WINDOW 1 Jig CPS	Value	Phase	WINDOW 2 Jig CPS	Value	Phase	WINDOW 3 Jig CPS	Value
Master		383.7	Master		168.9	Master		23.84
Before		380.7	Before		168.6	Before		23.73
	354.0 (Minimum) 376.0 (Nominal) 398.0 (Maximum)			155.0 (Minimum) 167.0 (Nominal) 179.0 (Maximum)			21.50 (Minimum) 24.00 (Nominal) 26.50 (Maximum)	
Phase	WINDOW 4 Jig CPS	Value	Phase	WINDOW 5 Jig CPS	Value	Phase	SGR Jig GAPI	Value
Master		13.72	Master		22.02	Master		160.7
Before		13.77	Before		22.83	Before		160.0
	12.50 (Minimum) 14.00 (Nominal) 15.50 (Maximum)			20.00 (Minimum) 22.50 (Nominal) 25.00 (Maximum)			148.0 (Minimum) 160.0 (Nominal) 172.0 (Maximum)	
Master: Calibration out of date 6-JAN-2000 3:55			Before: 18-MAR-2000 8:21					

Natural Gamma Spectroscopy - C Wellsite Calibration					
Quality Control Values					
Phase	DHVF Jig V	Value	Phase	Quality Windows Ratio Jig	Value
Master		1503	Master		2.272
Before		1516	Before		2.258
	1088 (Minimum) 1450 (Nominal) 1813 (Maximum)			2.150 (Minimum) 2.240 (Nominal) 2.330 (Maximum)	
Master: Calibration out of date 6-JAN-2000 3:55			Before: 18-MAR-2000 8:21		

Natural Gamma Spectroscopy - C Wellsite Calibration		
Quality Control Values Check		
Phase	Thorium peak Form Factor Jig	Value
Before		-0.03137
	-0.2000 (Minimum) 0 (Nominal) 0.2000 (Maximum)	

Natural Gamma Spectroscopy - C Master Calibration														
Master Quality Control Values														
Phase	Photomultiplier Res. CARC3			Value	Phase	APU WINDOW Jig CPS			Value	Phase	APL WINDOW Jig CPS			Value
Master				9.090	Master				963.1	Master				962.8
	4.500 (Minimum)	8.000 (Nominal)	11.50 (Maximum)			700.0 (Minimum)	1350 (Nominal)	1600 (Maximum)			700.0 (Minimum)	1350 (Nominal)	1600 (Maximum)	
Phase	Thorium peak Form Factor Jig			Value										
Master				-0.05460										
	-0.1000 (Minimum)	0 (Nominal)	0.1000 (Maximum)											
Master: Calibration out of date 6-JAN-2000 3:52														

COMPANY: Lamont Doherty WELL: ODP Leg 189, Site 1170 (WSTR-2A) FIELD: Tasmanian Seaway, West Tasmania Site COUNTY: Offshore STATE: Indian Ocean	BOTTOM LOG INTERVAL	3490 M
	SCHLUMBERGER DEPTH	3497.5
	DEPTH DRILLER	3496 M
	KELLY BUSHING	11.2 M
	DRILL FLOOR	10.9 M
	GROUND LEVEL	-2716 M



Geological High Sensitivity
Magnetic Log