

Schlumberger

PERFORM - Drilling Mechanics

2 in / hr Time Based

Real Time Log

Company: ExxonMobil Oil Corporation

Well: Freedom Unit 197 33B6

Field: Piceance Creek

County: Rio Blanco

State: Colorado

Country: U.S.A

APIN: 051031142400

Rig Name: H & P 321

Rig Type: Flex 4

Section: 33

Township: 1S

Range: 97W

FL: NAD 27 Colorado State Planes, Northern Zone

FL1: X: 1219858.60 ft Latitude: 39° 55' 17.290" N

FL2: Y: 226474.50 ft Longitude: 108° 16' 54.740" W

Log Measured From - Drill Floor: 6476.0 ft

Ground Level: 6446.0 ft

Permanent Datum - Mean Sea Level

Acquisition Dates: 31 Mar 10 to 04 Jul 10

Print Interval: 3/31/2010 3:57:46 AM to 7/6/2010 8:53:11 AM

Index Types: Time

Index Scales: 2" / 3600 secs

Depth Source: Driller's Depth

Depth Sensor: 3rd Party Depth

Conveyance: Drill Pipe

Print Type: Final

Spud Date: 3/31/2010

Other Services:

Directional Drilling



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 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.

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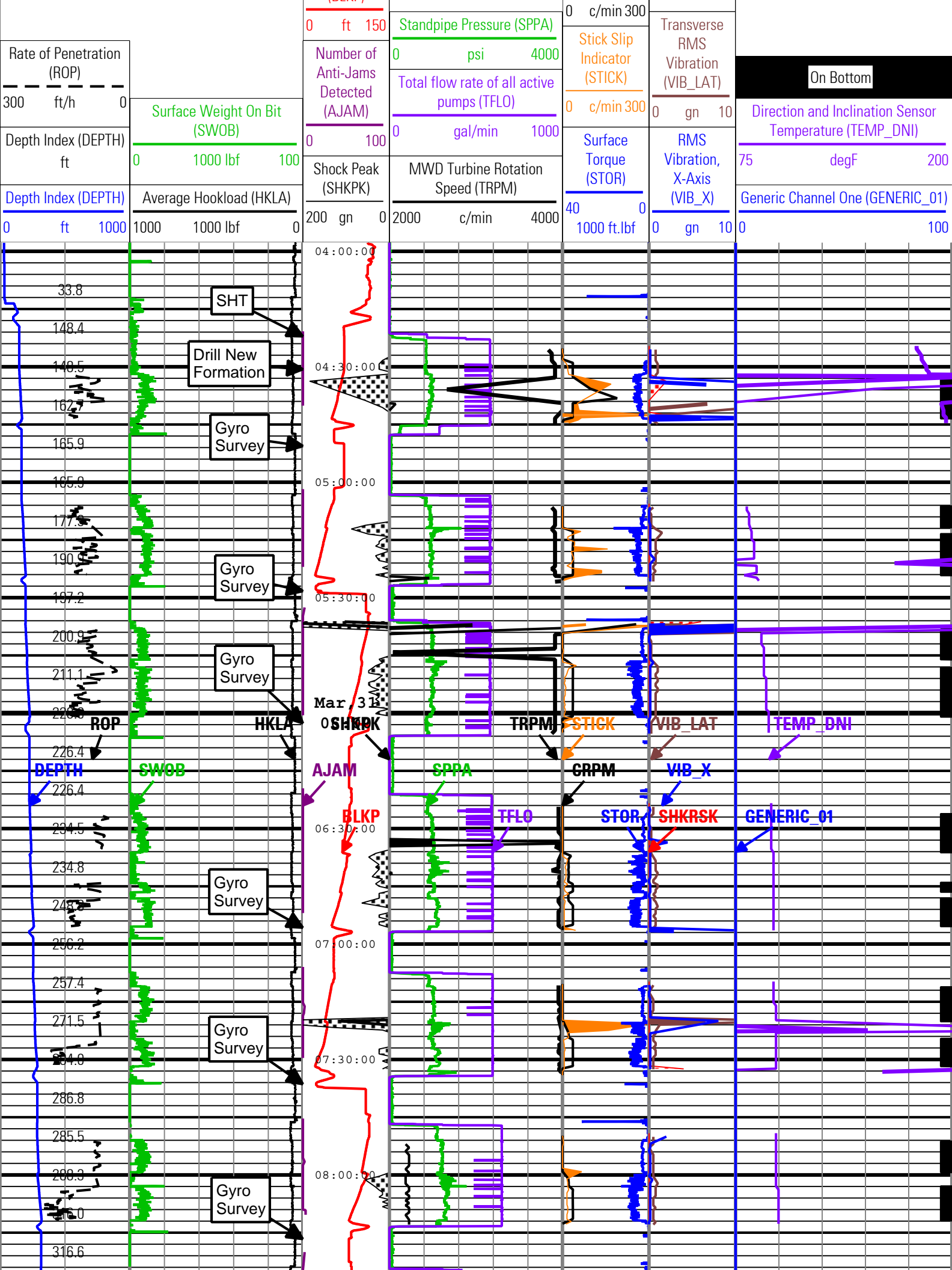
5.1 Software Version

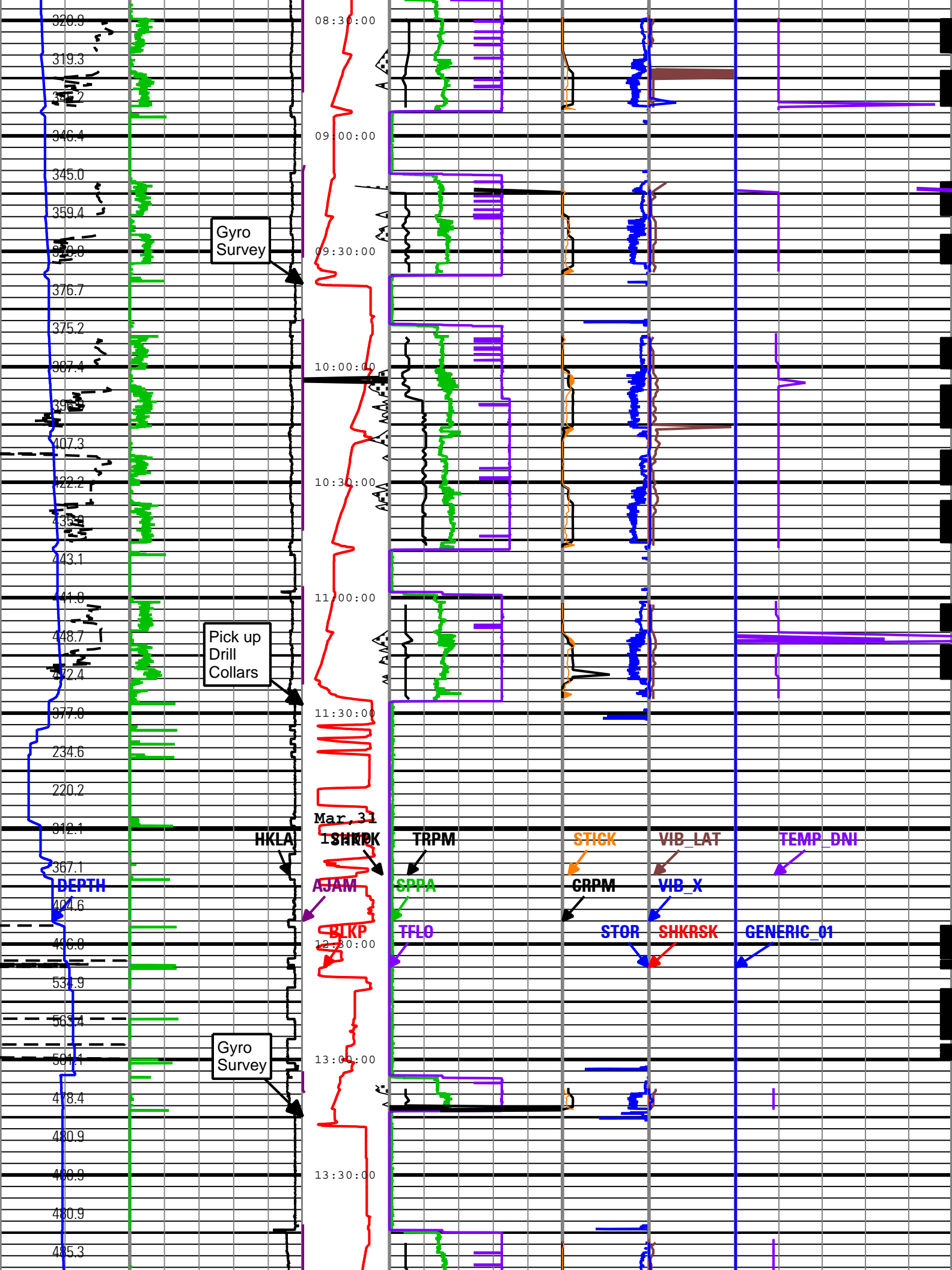
5.2 Pass Summary

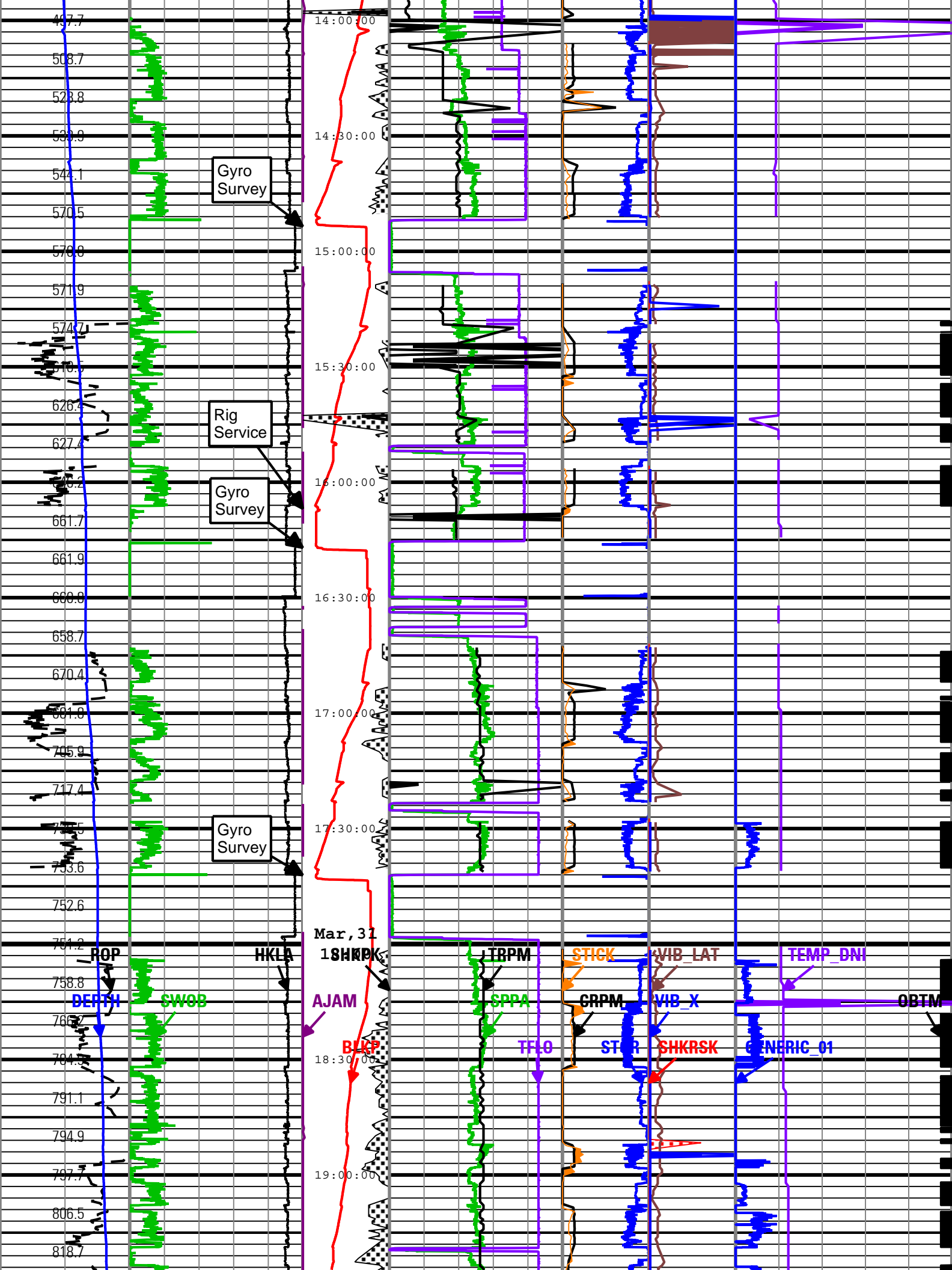
5.3 Log ( PERFORM - Drilling Mechanics )

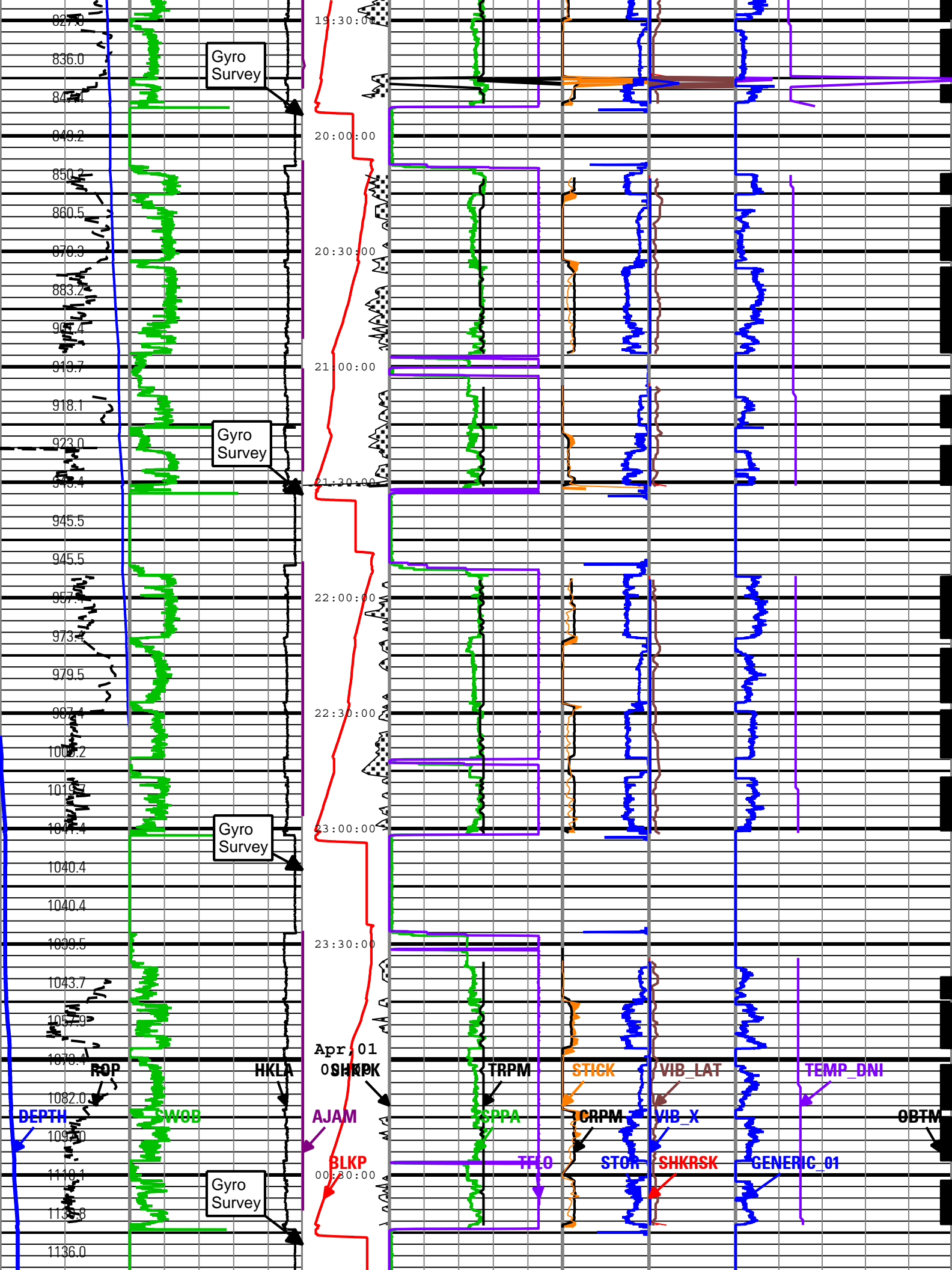
5.4 Parameter Listing
6. Tail

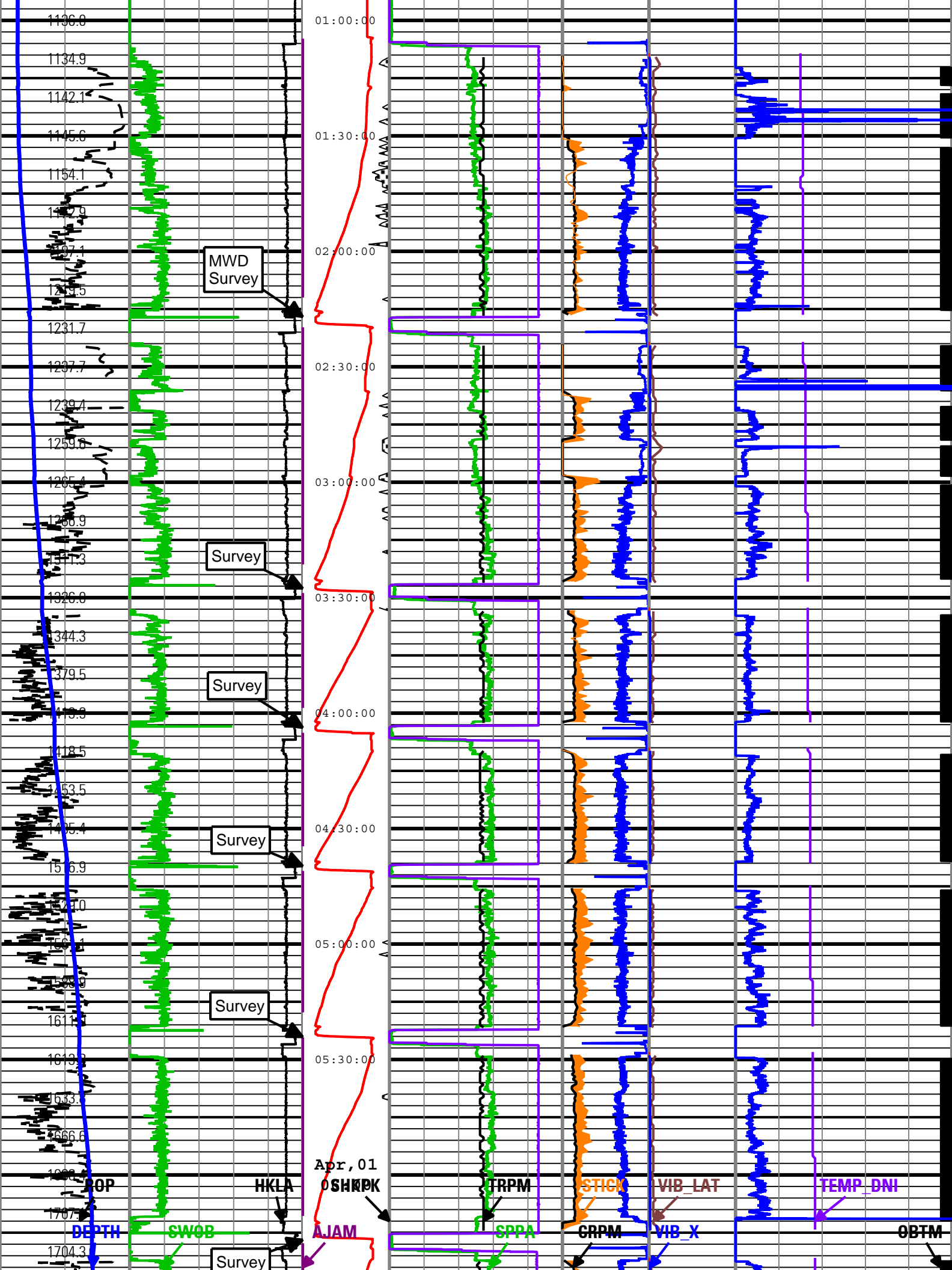
(B) K P

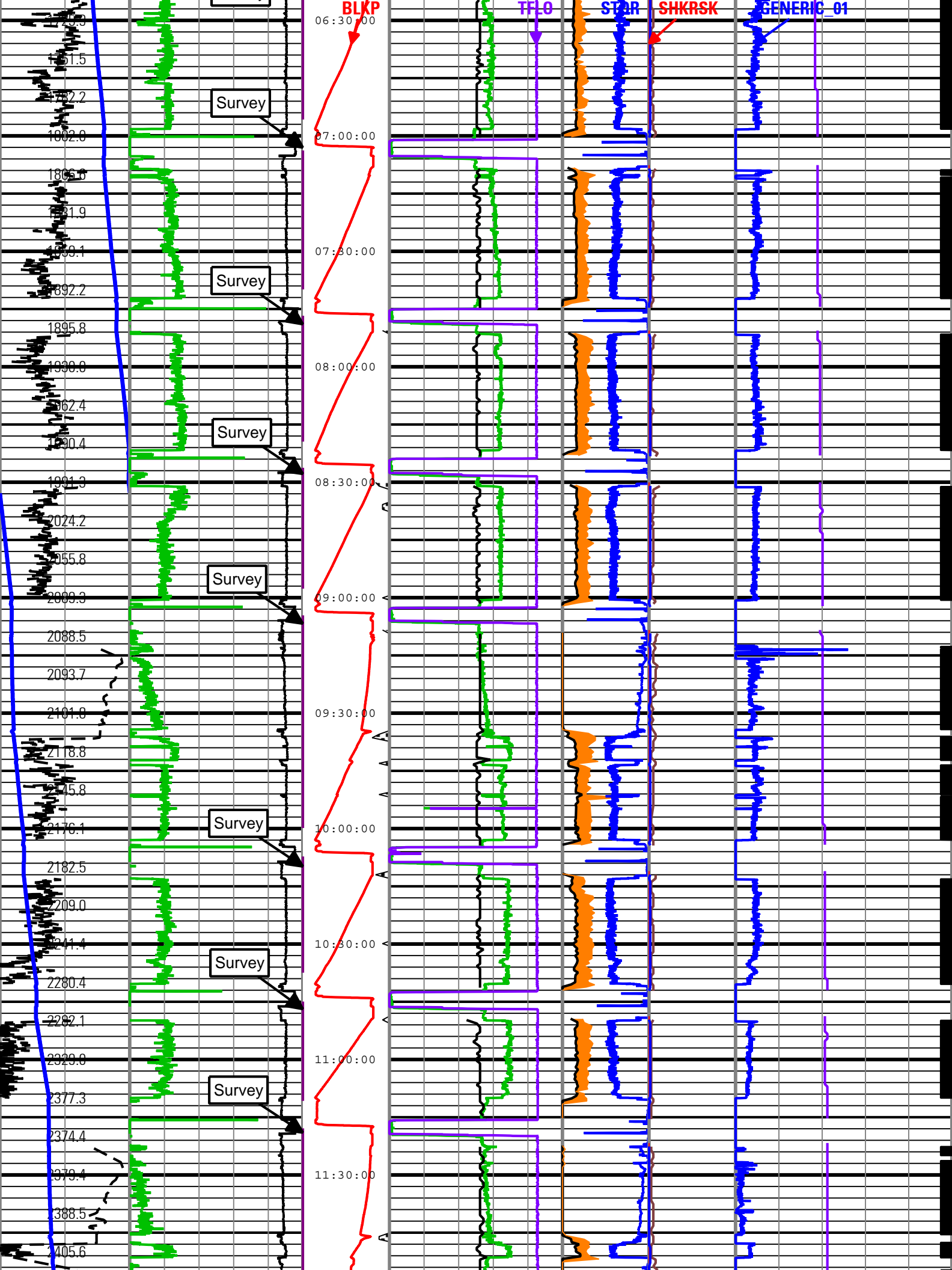


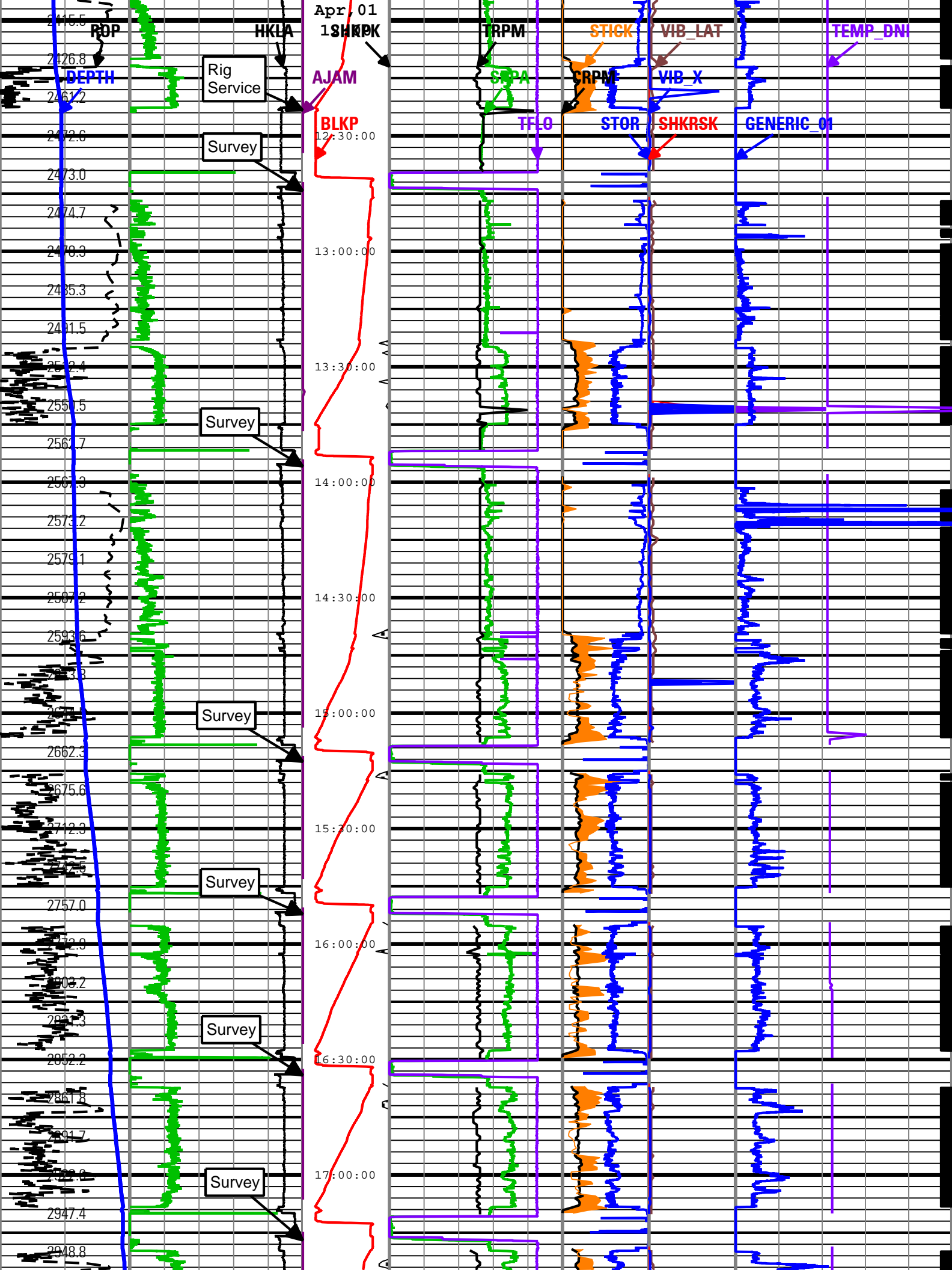


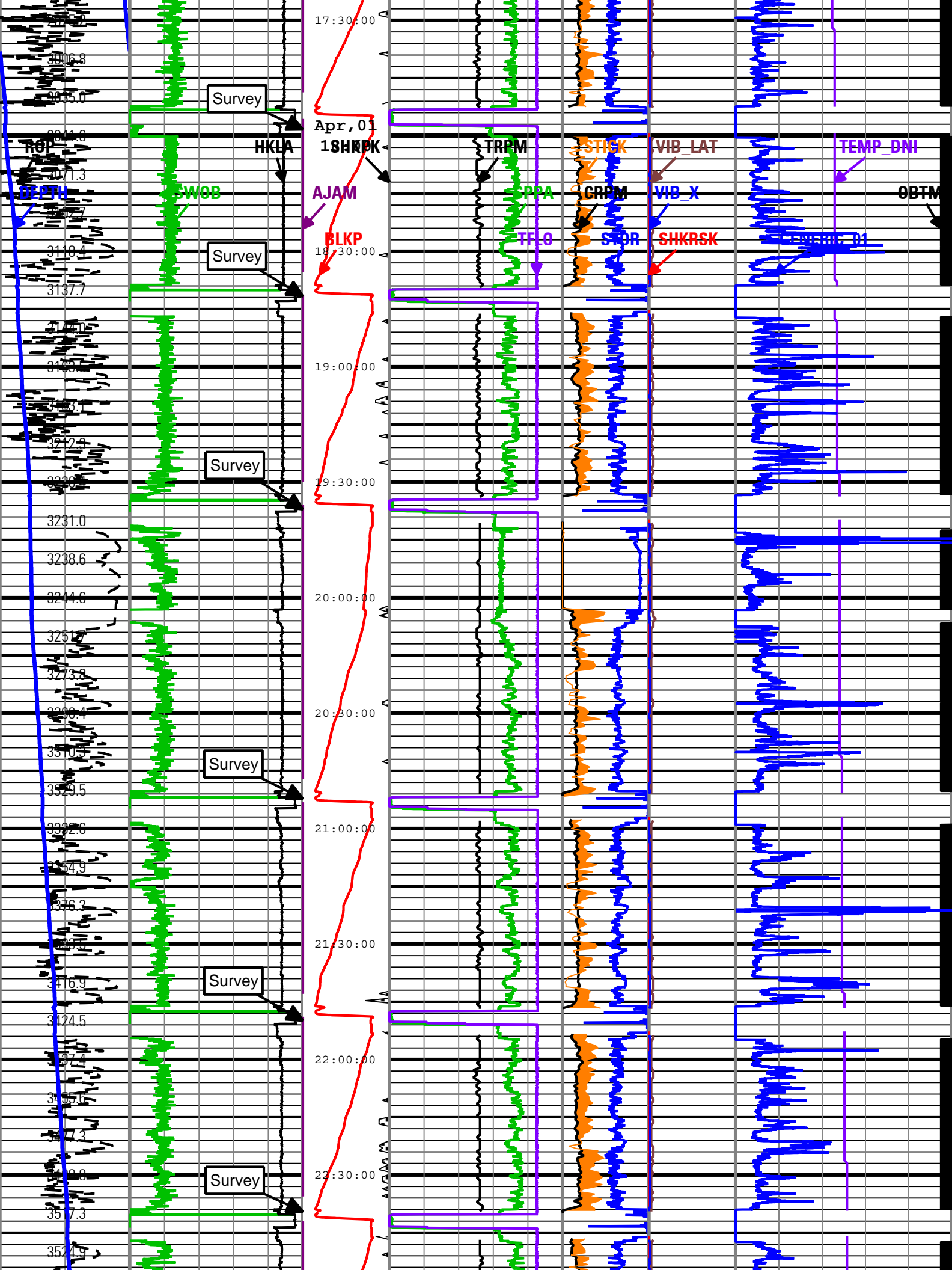


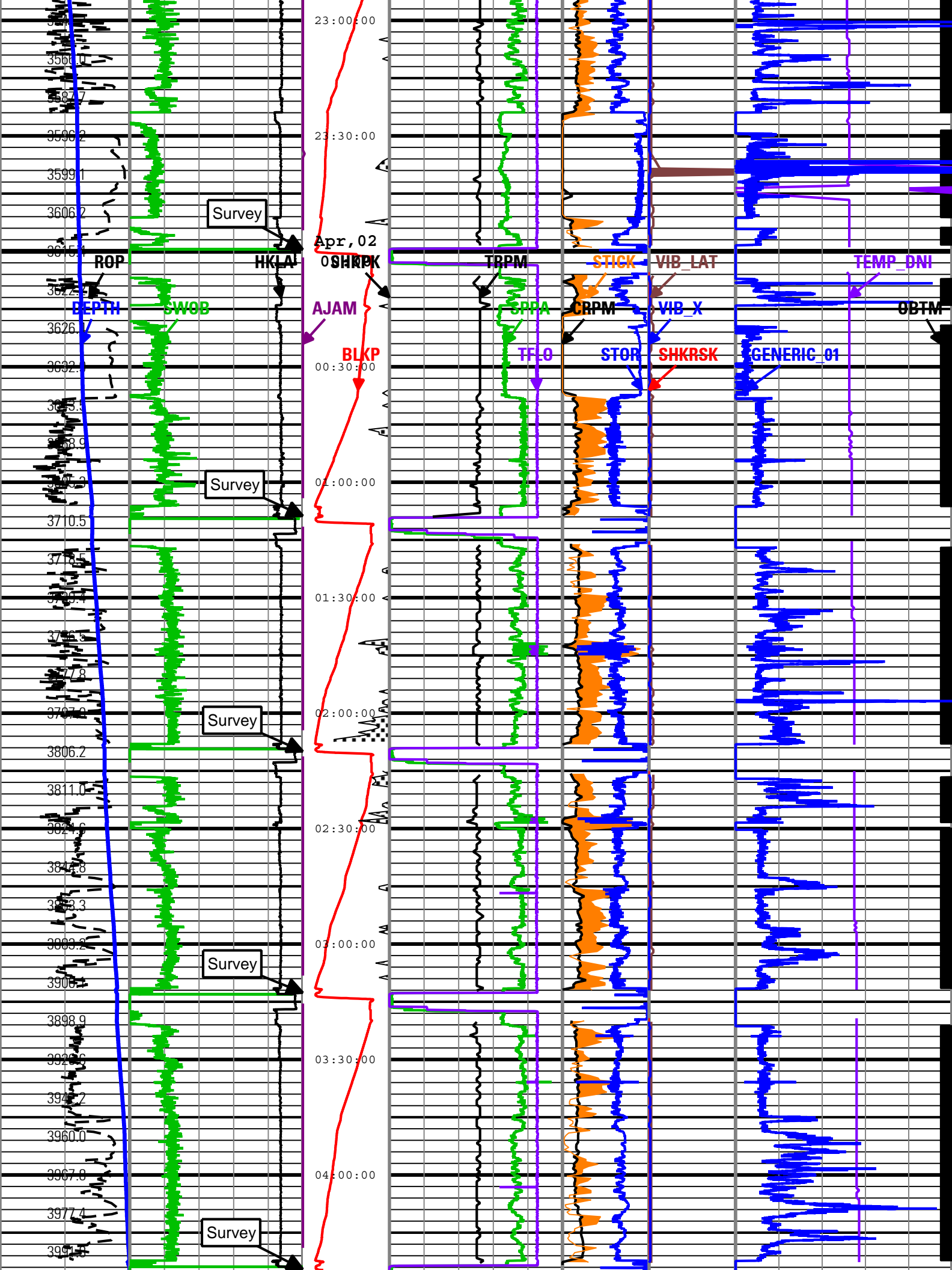


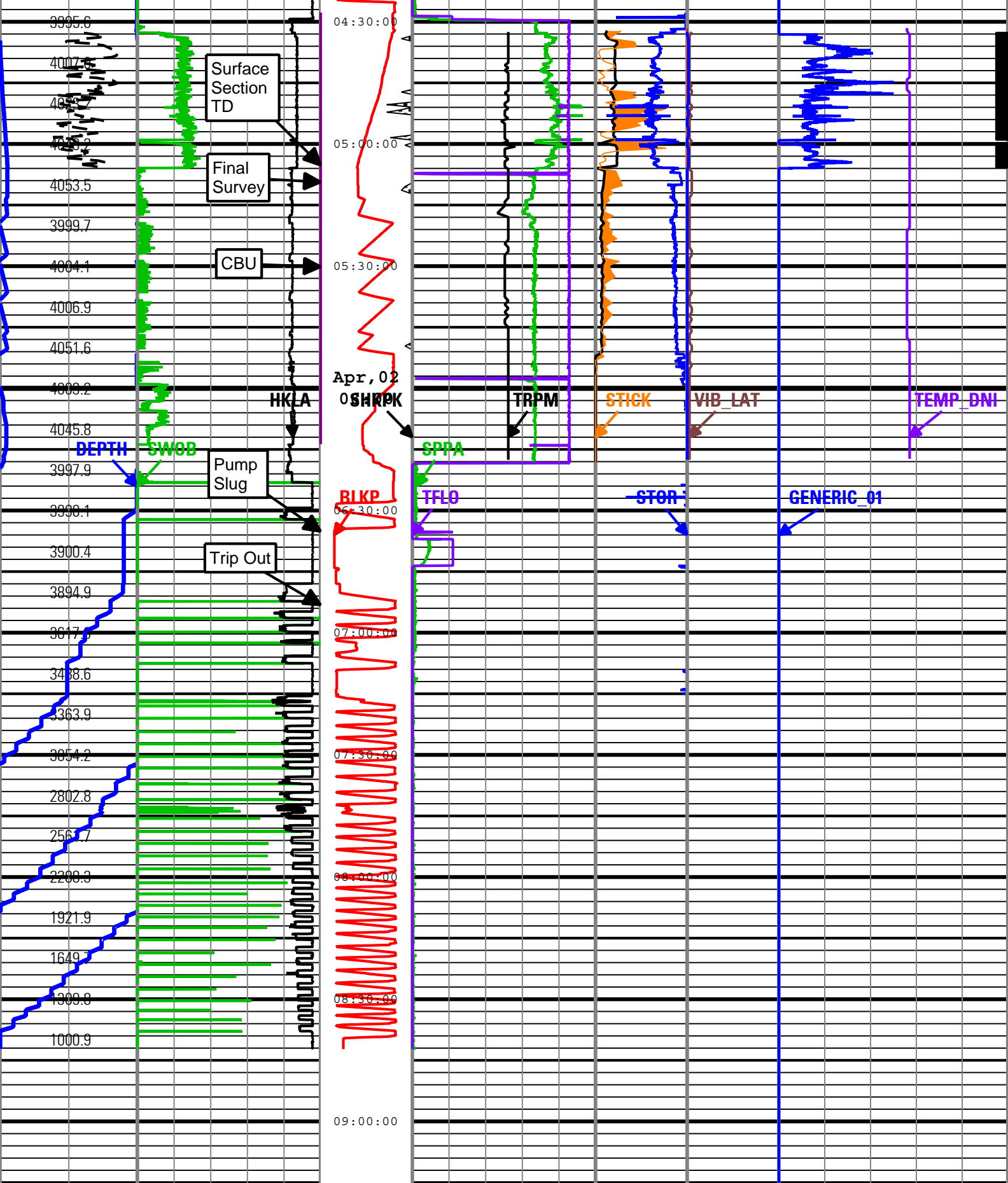












Rate of Penetration (ROP)	Surface Weight On Bit (SWOB)	Shock Peak	Standpipe Pressure (SPPA)	High Stick/Slip	Shock Risk	On Bottom
300 ft/h 0	0 1000 lbf 100	Height of block above rig floor (BLKP)	psi 4000	Collar Rotational Speed (CRPM)	Shock Risk (SHKRSK)	Direction and Inclination Sensor Temperature (TEMP_DNI)
Depth Index (DEPTH) ft	Average Hookload (HKLA)	0 ft 150	Total flow rate of all active pumps (TFLO)	0 gal/min 1000	0 5 75 degF 200	Generic Channel One (GENERIC_01)
	1000 1000 lbf 0				Transverse	

Depth Index (DEPTH)

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0 ft 1000

Number of Anti-Jams Detected (AJAM)	0	100
Shock Peak (SHKPK)	200 gn	0

[illegible]

0	c/min 300
Stick Slip Indicator (STICK)	
0	c/min 300
Surface Torque (STOR)	
40	0
1000 ft.lbf	

RMS Vibration (VIB_LAT)		
0	gn	10
RMS Vibration, X-Axis (VIB_X)		
0	gn	10

A horizontal number line with arrows at both ends. The line is labeled with '0' at the left end and '100' at the right end. A blue dot is placed at the 25 mark, and a red dot is placed at the 75 mark.

Description: TeleScope + ARC Drilling Mechanics Time RT    Format: Log ( PERFORM - Drilling Mechanics )    Index Scale: 2 in per 3600 s    Index Type: Time  
Creation Date: 06-Jul-2010 08:53:30

## Run 2

## PERFORM - Drilling Mechanics

## Software Version

Acquisition System		Version	
MaxWell		1.2.8706.0	
Framework Patch		FWK-BGC-20091125-1.2.8706.1057	
Application Patch		APL-SRPC-DnM-1.2.8706.1045	
Tool Elements	Description	Software Version	Firmware Version
DRILLING_SURFACE	DRILLING_SURFACE	1.2.8706.1057	

## Pass Summary

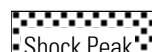
Run Name	Pass Objective	Direction	Start	Stop	Acquisition Start Date	Acquisition Start Time
Run 2	TimeLogicalAcq	Down	04-Jul-2010 18:03:00		04-Jul-2010	18:03:00

## Log

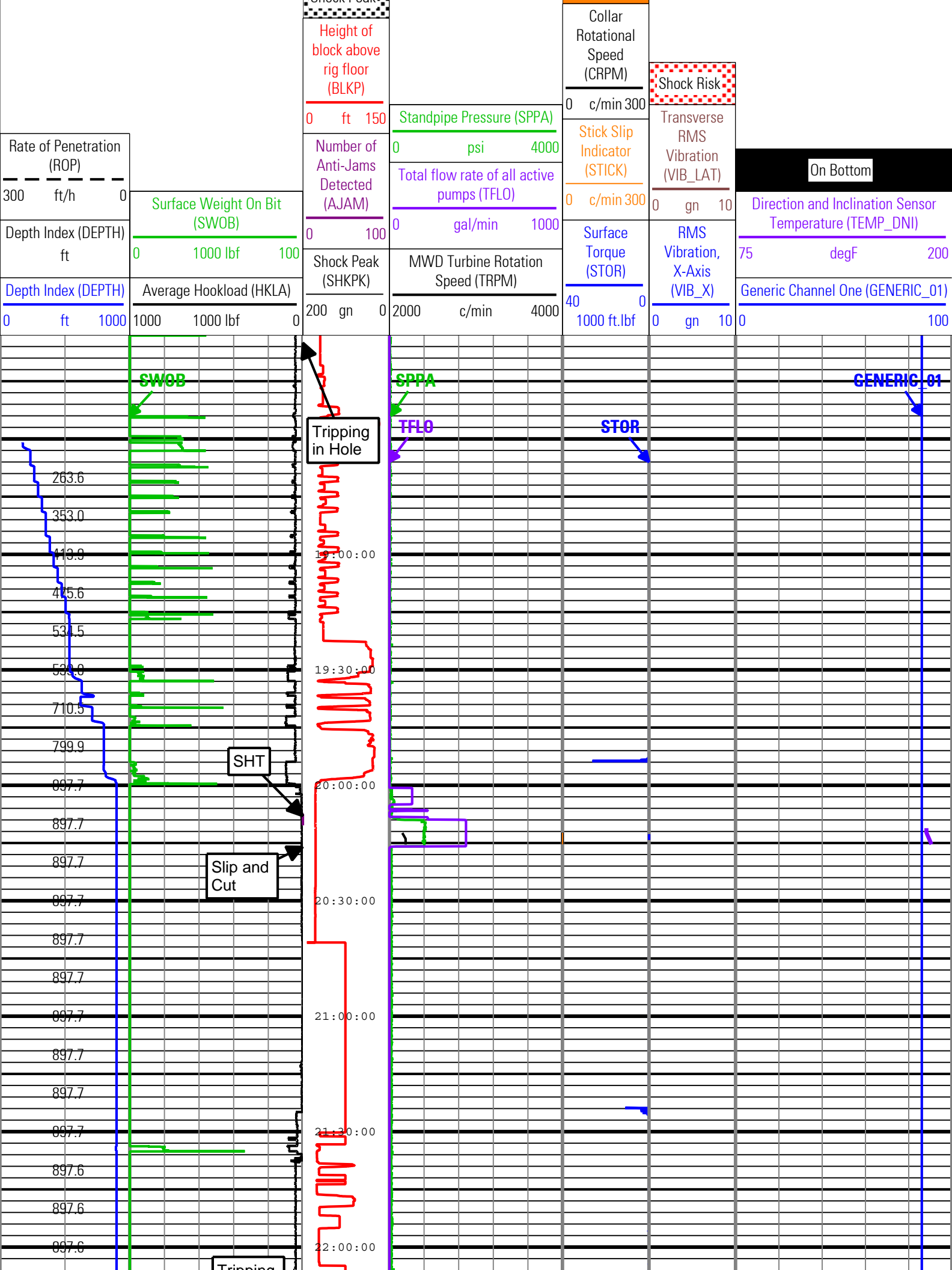
Run 2: TimeLogicalAcq E660219A-C437-43F7-8B32-EE430A6D6337

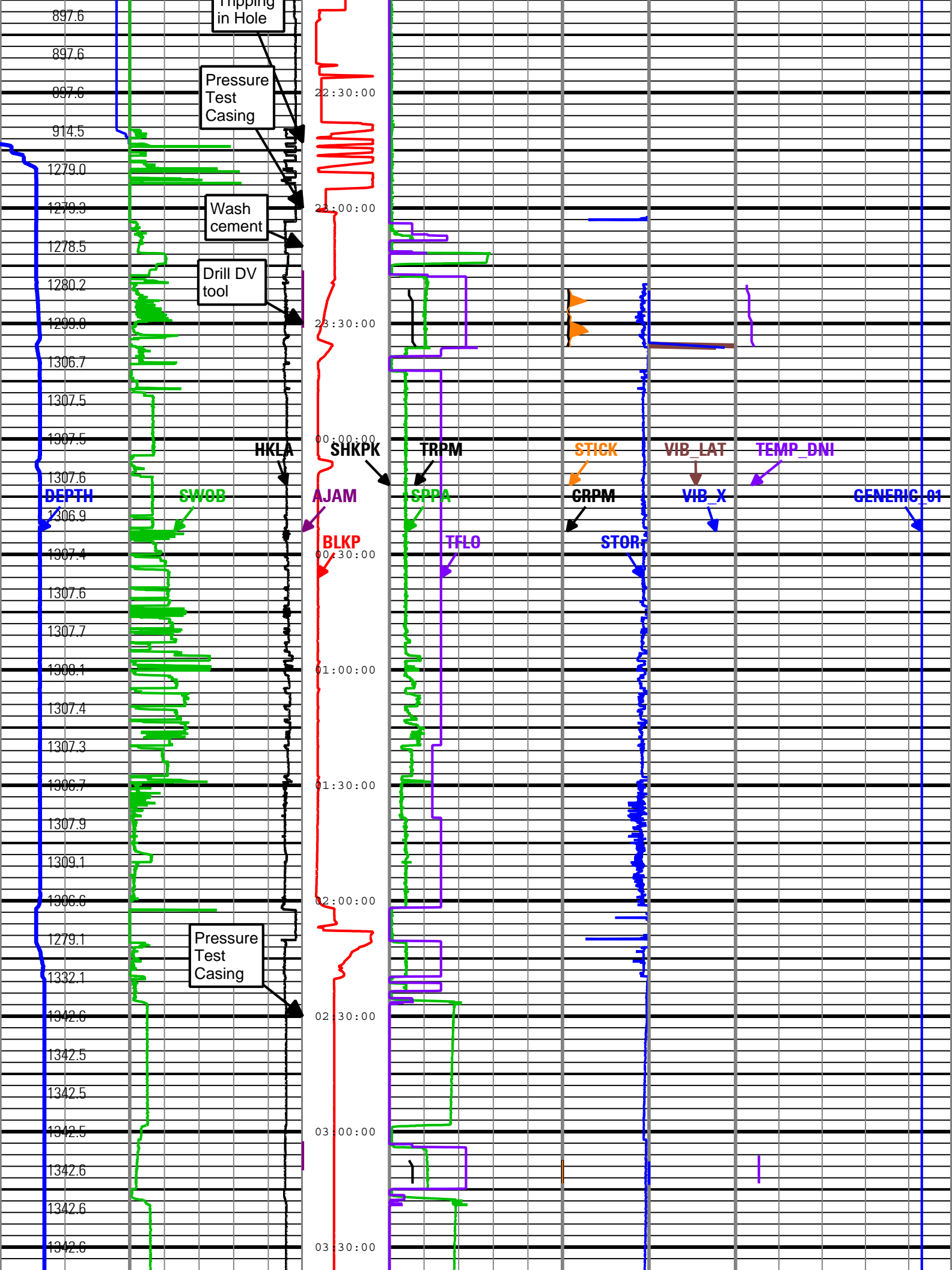
Description: TeleScope + ARC Drilling Mechanics Time RT    Format: Log ( PERFORM - Drilling Mechanics )    Index Scale: 2 in per 3600 s    Index Type: Time  
Creation Date: 06-Jul-2010 08:53:44

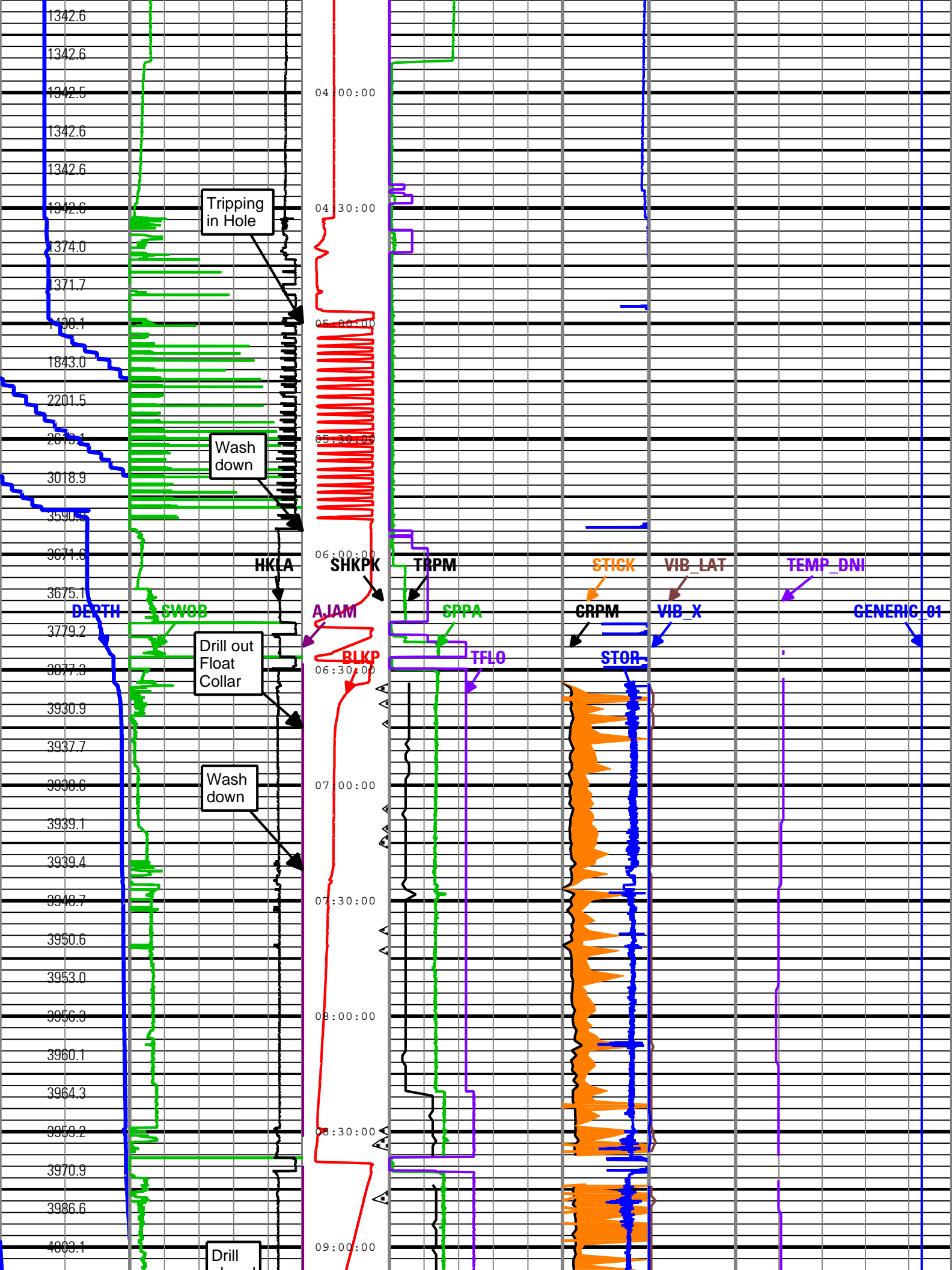
AJAM	TELE675-IWOB:TELE675-IWOB	ACQ - RT
BLKP	DRILLING_SURFACE	ACQ - RT
CRPM	TELE675-IWOB:TELE675-IWOB	ACQ - RT
DEPTH	DnMWorkflow	ACQ - RT
GENERIC_01	DRILLING_SURFACE	ACQ - RT
HKLA	DRILLING_SURFACE	ACQ - RT
OBTM	DnMWorkflow	ACQ - RT
ROP	DRILLING_SURFACE	ACQ - RT
SHKPK	TELE675-IWOB:TELE675-IWOB	ACQ - RT
SPPA	DRILLING_SURFACE	ACQ - RT
STICK	TELE675-IWOB:TELE675-IWOB	ACQ - RT
STOR	DRILLING_SURFACE	ACQ - RT
SWOB	DRILLING_SURFACE	ACQ - RT
TEMP_DNI	TELE675-IWOB:TELE675-IWOB	ACQ - RT
TFLO	DRILLING_SURFACE	ACQ - RT
TRPM	TELE675-IWOB:TELE675-IWOB	ACQ - RT
VIB_LAT	TELE675-IWOB:TELE675-IWOB	ACQ - RT
VIB_X	TELE675-IWOB:TELE675-IWOB	ACQ - RT

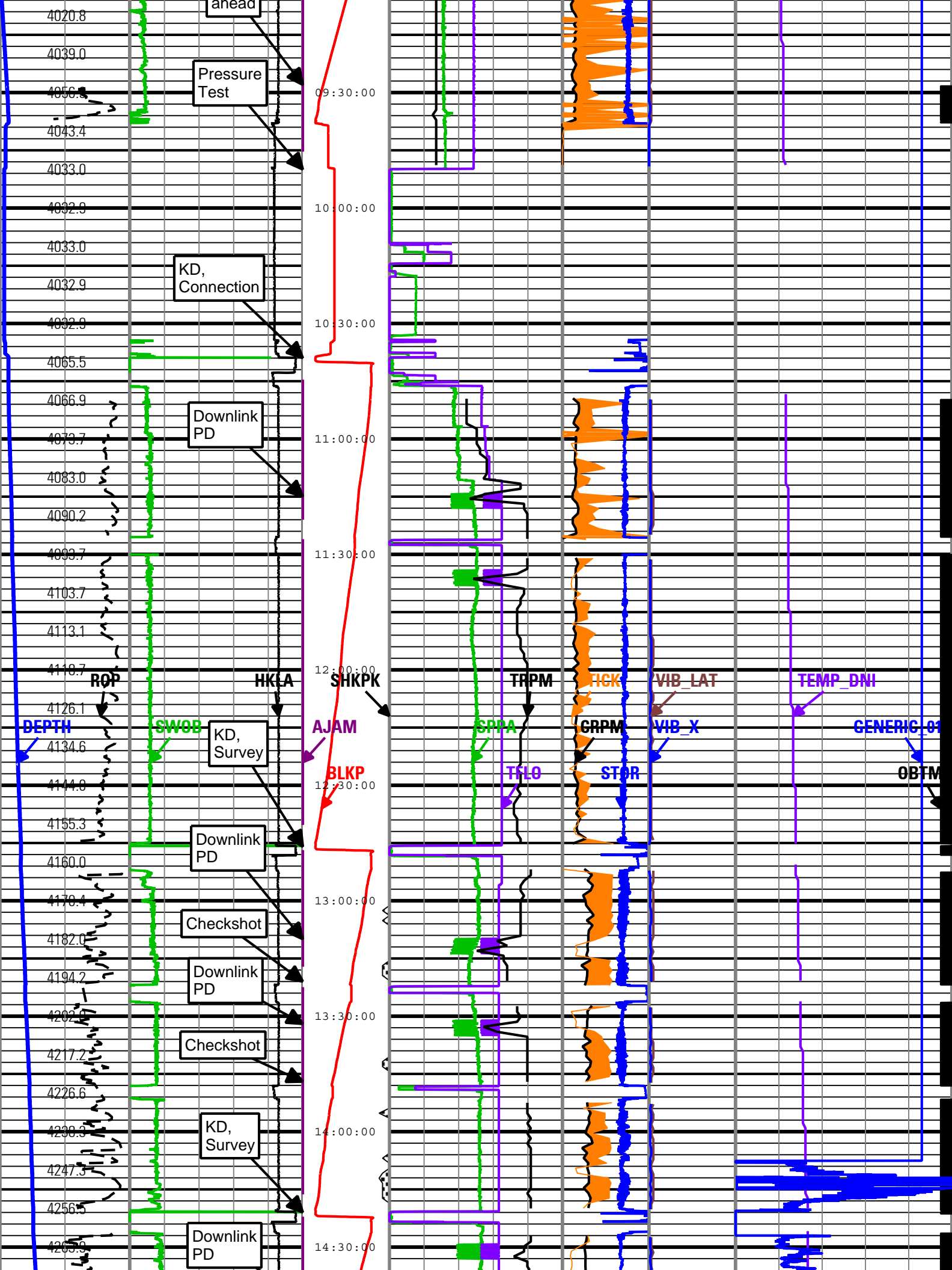


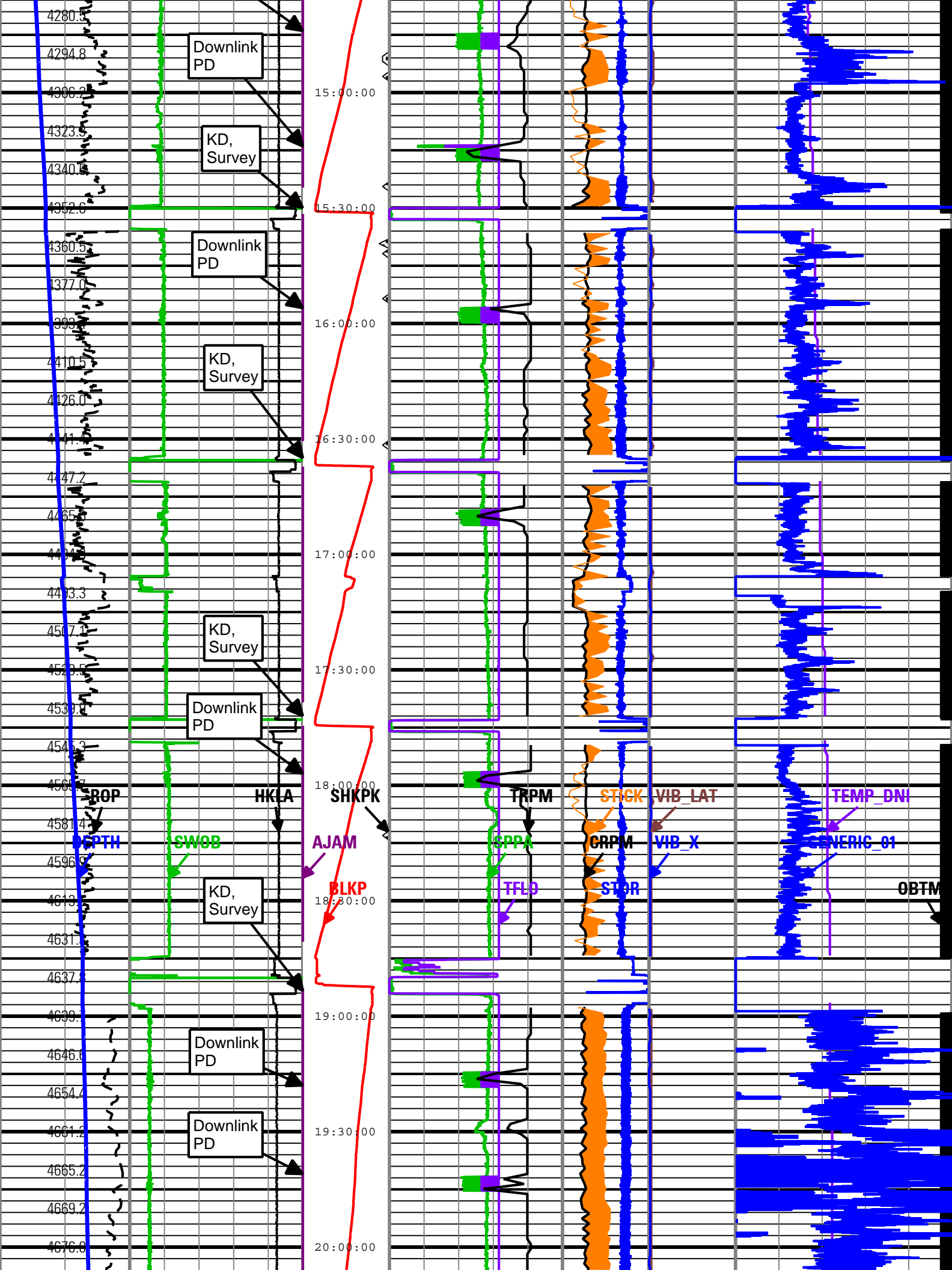
High  
SticknSlip

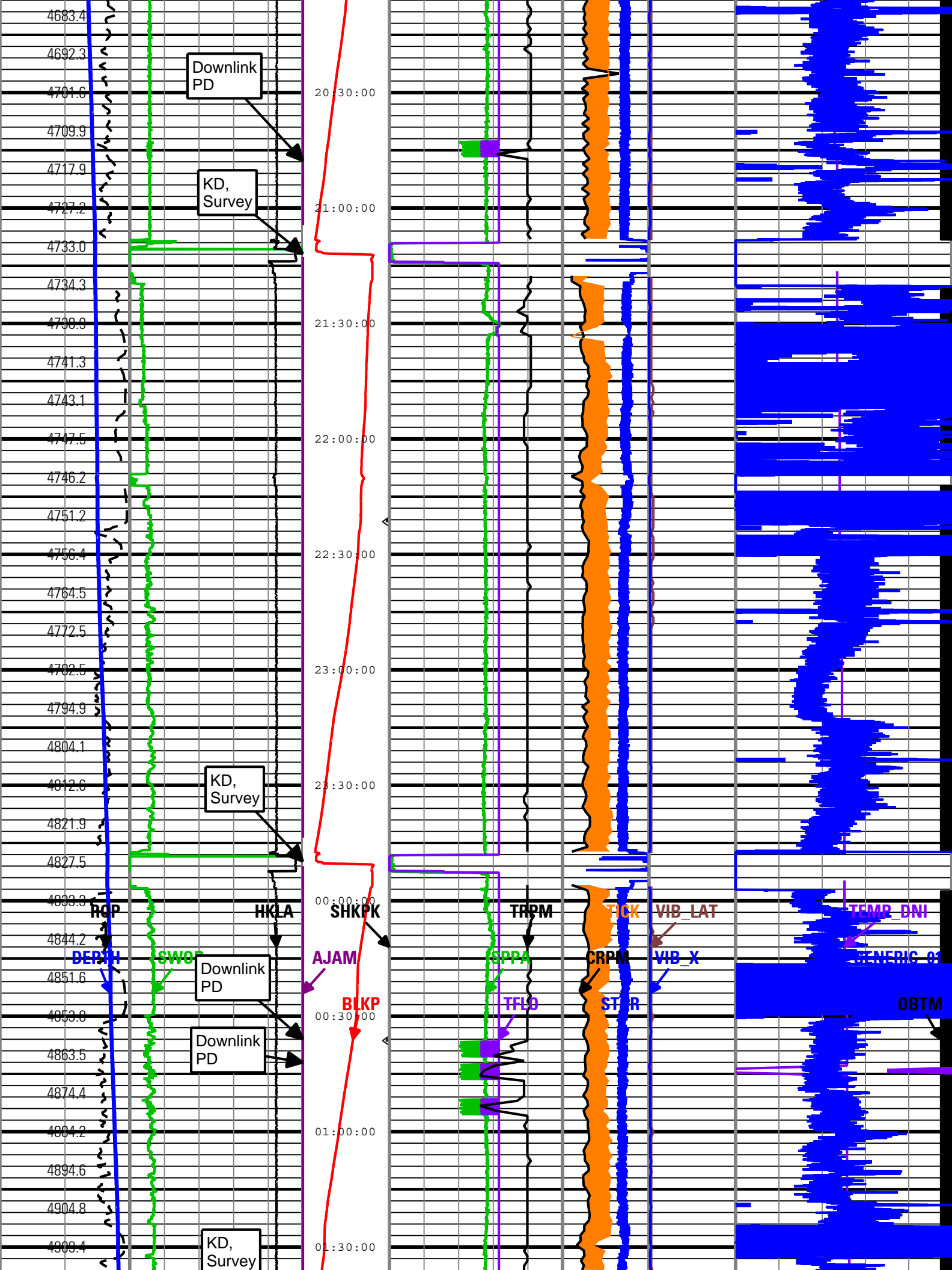


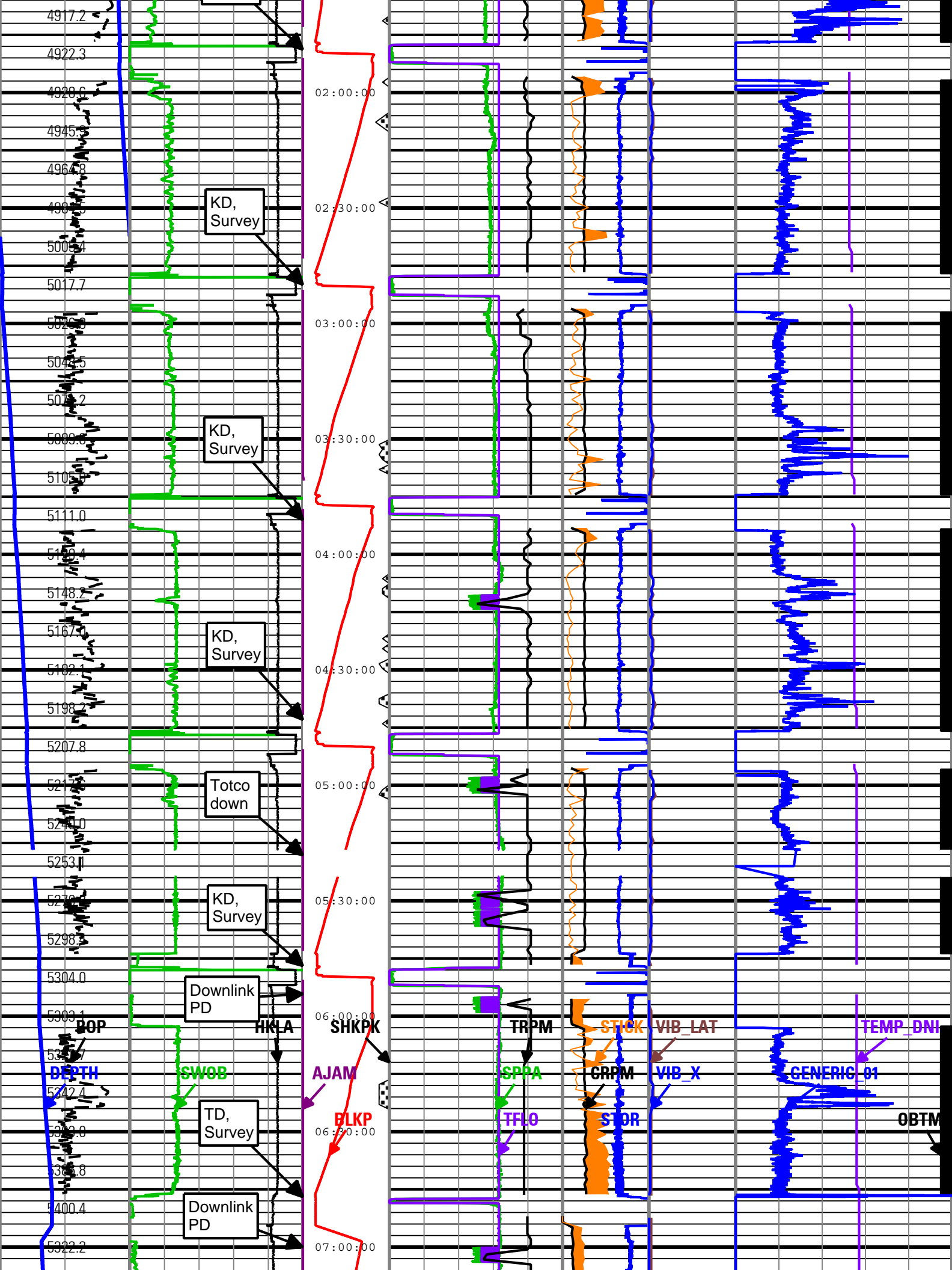


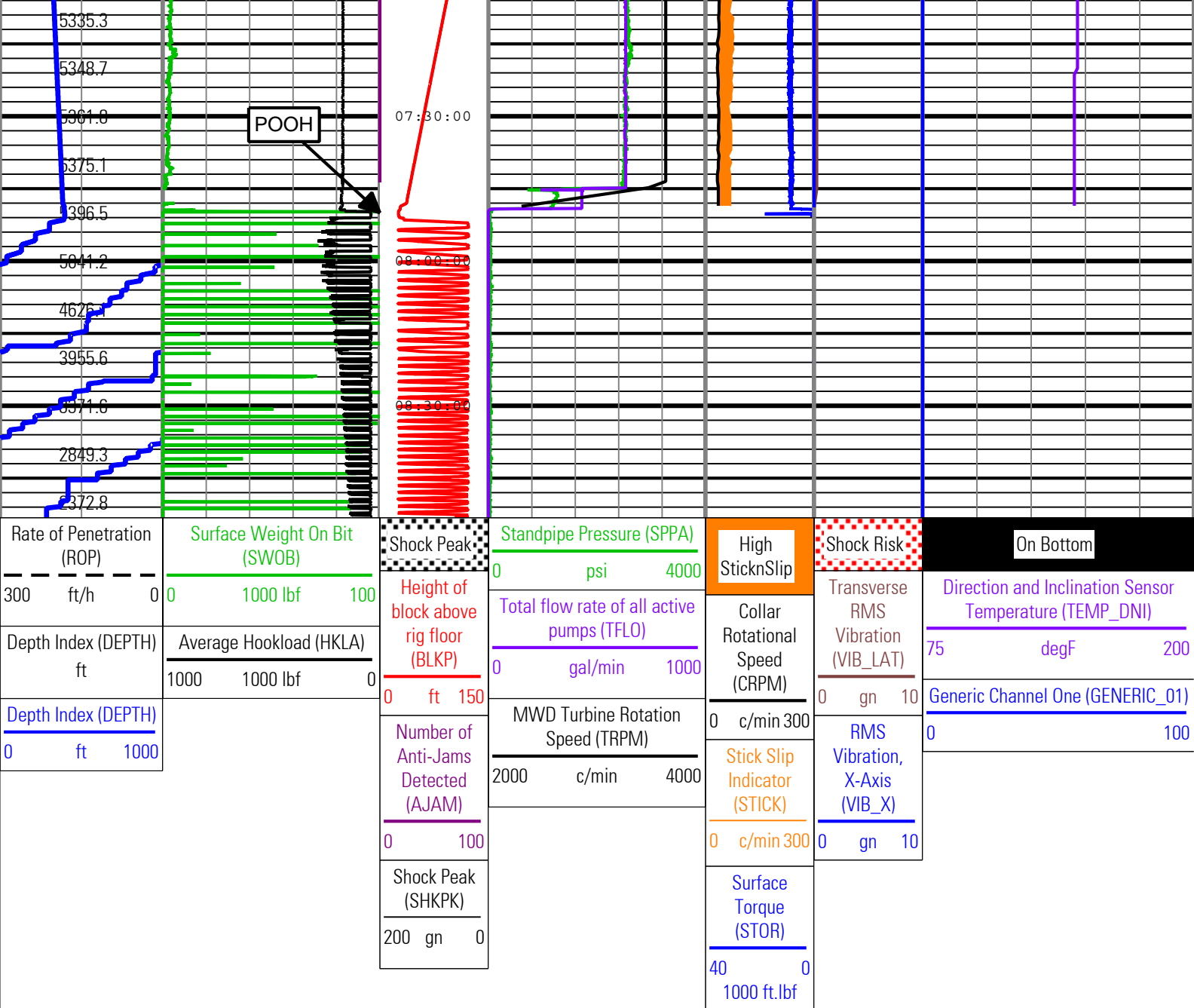












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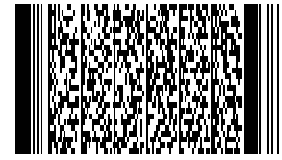
Tool Control Parameters				
Parameter	Description	ToolPath	Value	Unit
OFFBTM_TH	Threshold for deciding whether the bit is off bottom	DnMWorkflow	Time Zoned	ft

Time Zone Parameters			
Parameter	Value	Start	Stop
OFFBTM_TH	0	04-Jul-2010 18:03:08	05-Jul-2010 10:51:29
OFFBTM_TH	0.15	05-Jul-2010 10:51:29	05-Jul-2010 12:48:10
OFFBTM_TH	0.05	05-Jul-2010 12:48:10	05-Jul-2010 12:49:22
OFFBTM_TH	0.15	05-Jul-2010 12:49:22	05-Jul-2010 14:21:21
OFFBTM_TH	0.05	05-Jul-2010 14:21:21	05-Jul-2010 15:48:02
OFFBTM_TH	0.15	05-Jul-2010 15:48:02	06-Jul-2010 08:42:47

**Company:** ExxonMobil Oil Corporation

**Well:** Freedom Unit 197 33B6

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County: Rio Blanco  
State: Colorado  
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