

# RIG MONITORING DRILLING LOG

Company	:	Bass Strait Oil Company Ltd
Rig	:	Ocean Patriot
Well	:	ZaneGrey-1
Field	:	ZaneGrey / Gippsland Basin
Country	:	Australia
DOE Number	:	

Latitude : 38° 34' 31.64" South  
Longitude : 147° 59' 16.27" East



















UTM Easting = 586,049.89 m  
UTM Northing = 5,729,856.42 m

Other Services





















Job No. : AJUN0003415248									
Depth Logged		: 94.00 m	To	2,772.50 m	Unit No.	: 197			
Date Logged		: 27-Jan-05	To	11-Feb-05					
Total Depth MD		: 2,772.50 m	TVD	: 2,420.70 m	Plot Type	: Final			
Spud Date		: 27-Jan-05			Plot Date	: 21-Jun-05			
Borehole Record (MD)									
Run No.	Size	From	To	Run No.	Size	From	To		
1	914,000 mm	94.00 m	129.50 m						
2	406,000 mm	129.50 m	1,095.00 m						
3	311,150 mm	1,095.00 m	2,103.00 m						
4	311,150 mm	2,103.00 m	2,702.00 m						
5	311,150 mm	2,702.00 m	2,772.50 m						
Casing Record (MD)									
	Size	Weight	From	To					
	762,000 mm	461.34 kgpm	SURFACE	127.75 m					
	339,999 mm	101.20 kgpm	SURFACE	1,090.61 m					
	244,475 mm	69.94 kgpm	SURFACE	2,184.00 m					

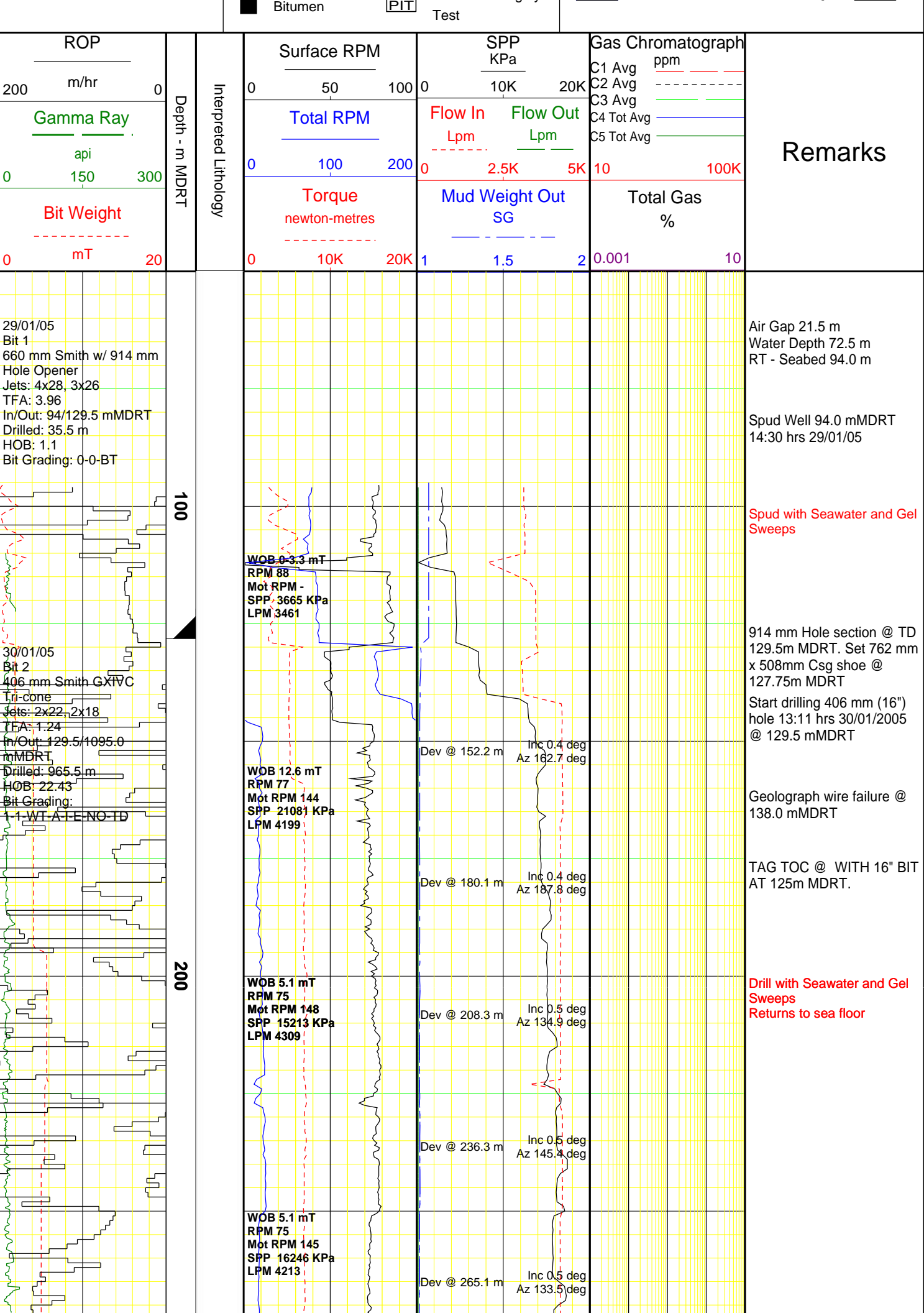
## LEGEND

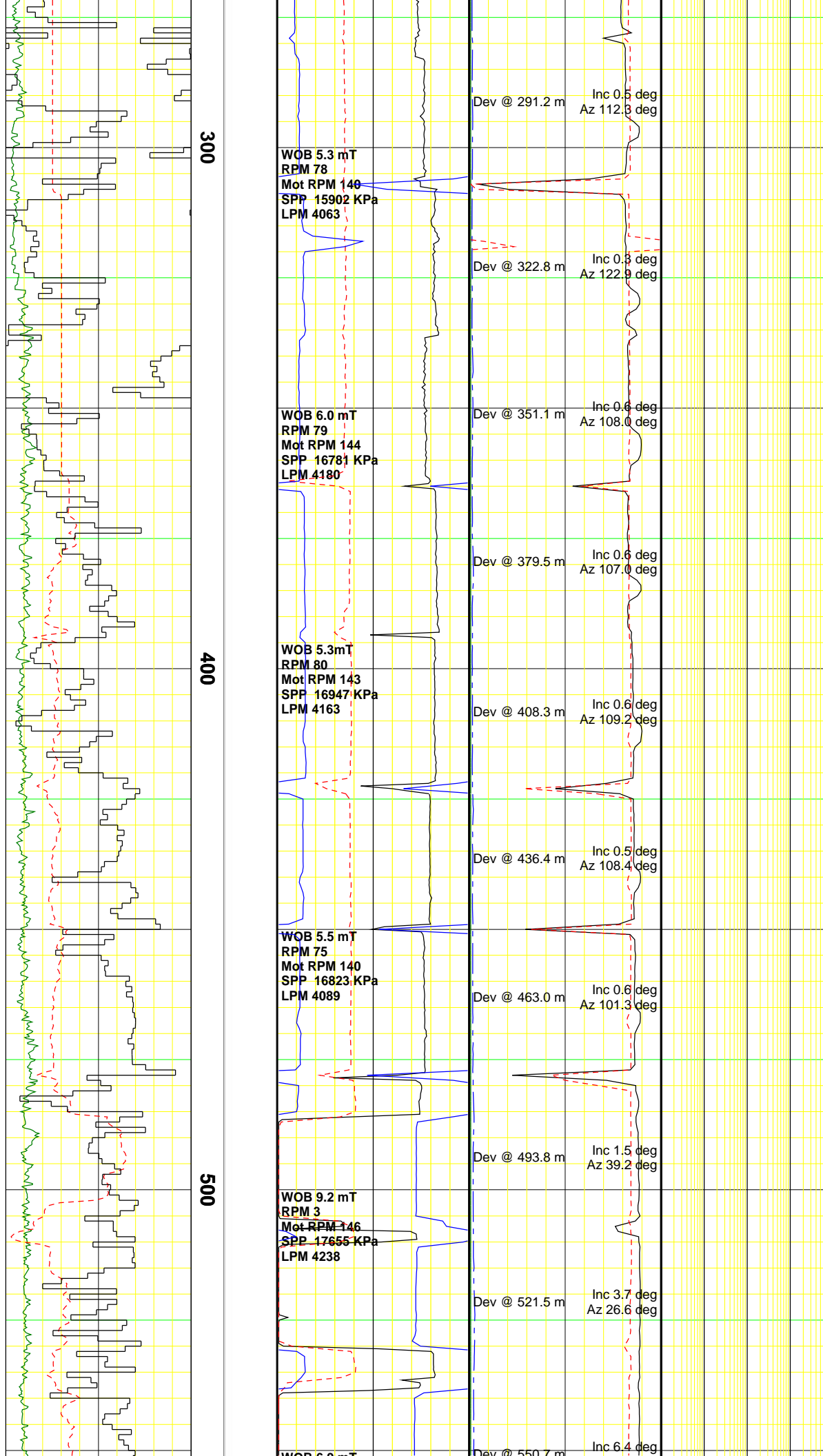
## Abbreviations and Symbols

Drilling Data		Mud Data	
BG	Background Gas	Cl- Chloride Ion Conc	Rm Mud Resistivity
BHT	Bottomhole Temp	FC Filter Cake	Rmf Filtrate Resistivity
C	Carbide Test	FL Filtrate Loss	S Solids Content
CB	Core Bit	G Gels	Vis Funnel Viscosity
CG	Connection Gas	pH Hydrogen Ion Content	MW Mud Weight
CKF	Check For Flow	PV Plastic Viscosity	YP Yield Point
CO	Circulate Out	<div>Engineering Data</div> <div><div>Core No.</div><div>DST No.</div><div>Casing Seat</div><div>Side Wall Core</div><div>Gas Traces</div><div>Gas</div><div>Oil Traces</div><div>Oil</div><div>Pressure Integrity</div><div>Water</div><div>Salt Water</div><div>Fresh Water</div><div>Hydrocarbons Smell</div><div>H2S Smell</div><div>Interval Tester</div><div>Wireline Log Run</div><div>Leakoff Test</div><div>Pressure Integrity</div></div>	
DC	Depth Correction		
DS	Direction Survey		
DST	Drillstem Test		
FLT	Flowline Temp.		
LAT	Logged After Trip		
NB	New Bit		
NR	No Returns		
PDC	Polycrystalline Diamond		
	Compound Bit		
PR	Partial Returns		
RPM	Revs Per Minute		
RRB	Rerun Bit		
STG	Short Trip Gas		
TB	Turbo Drill		
TG	Trip Gas		
U	Gas Units		
WOB	Weight On Bit		

## Lithology Symbols

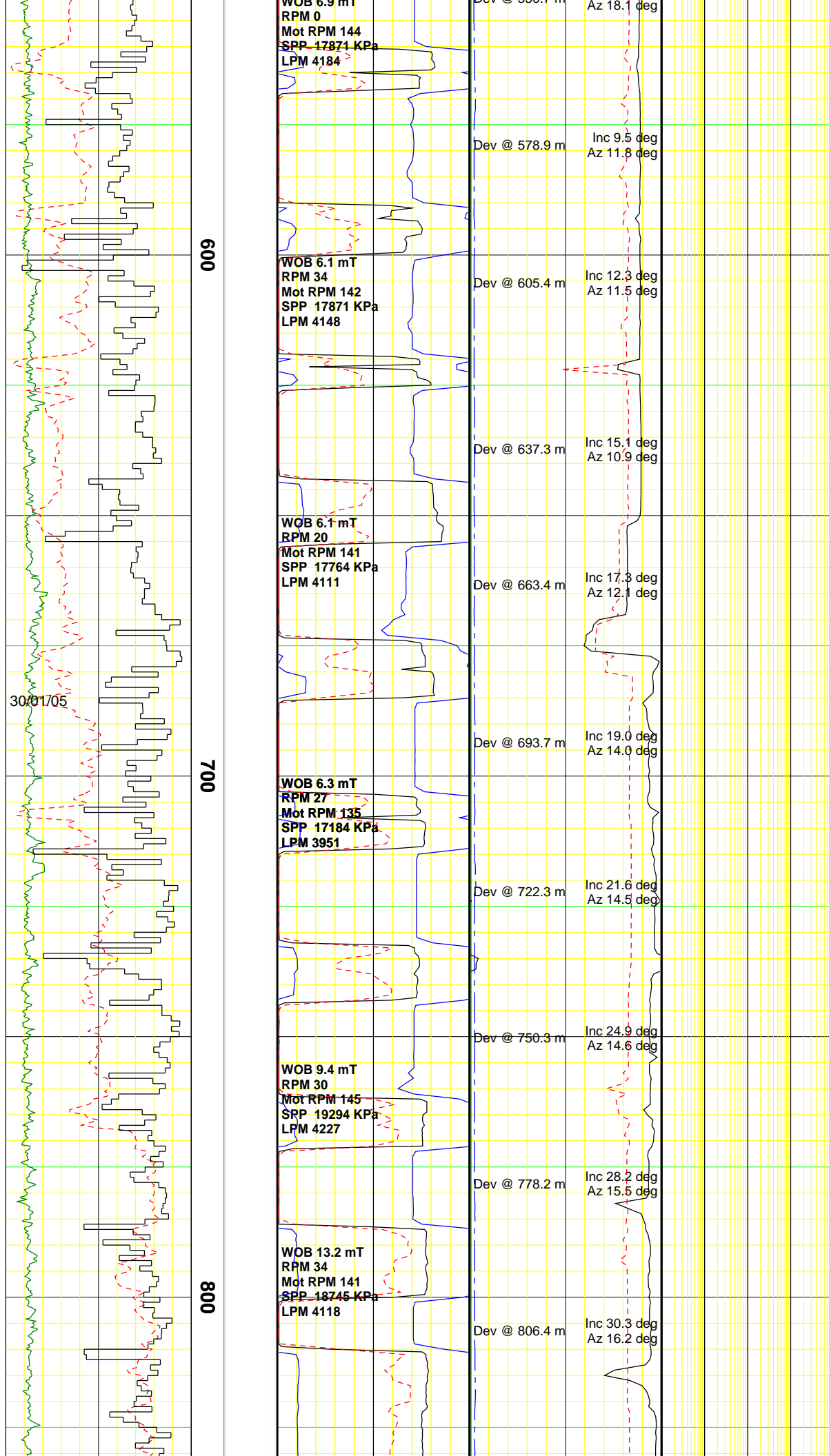
	<b>Sandstone</b>	<b>Calcsiltite</b>	
	<b>Silty Sandstone</b>	<b>Calcarenite</b>	
	<b>Silt</b>	<b>Mudstone</b>	
	<b>Siltstone</b>	<b>Marl</b>	
	<b>Clay</b>	<b>Glauconitic Sandstone</b>	
	<b>Claystone</b>	<b>Chert</b>	
	<b>Calcareous Claystone</b>	<b>Conglomerate</b>	
	<b>Limestone</b>	<b>Igneous</b>	
	<b>Dolomite</b>	<b>Coal</b>	
	<b>Calclutite</b>	<b>No Sample</b>	





Drill with Seawater and Gel  
Sweeps  
Returns to sea floor

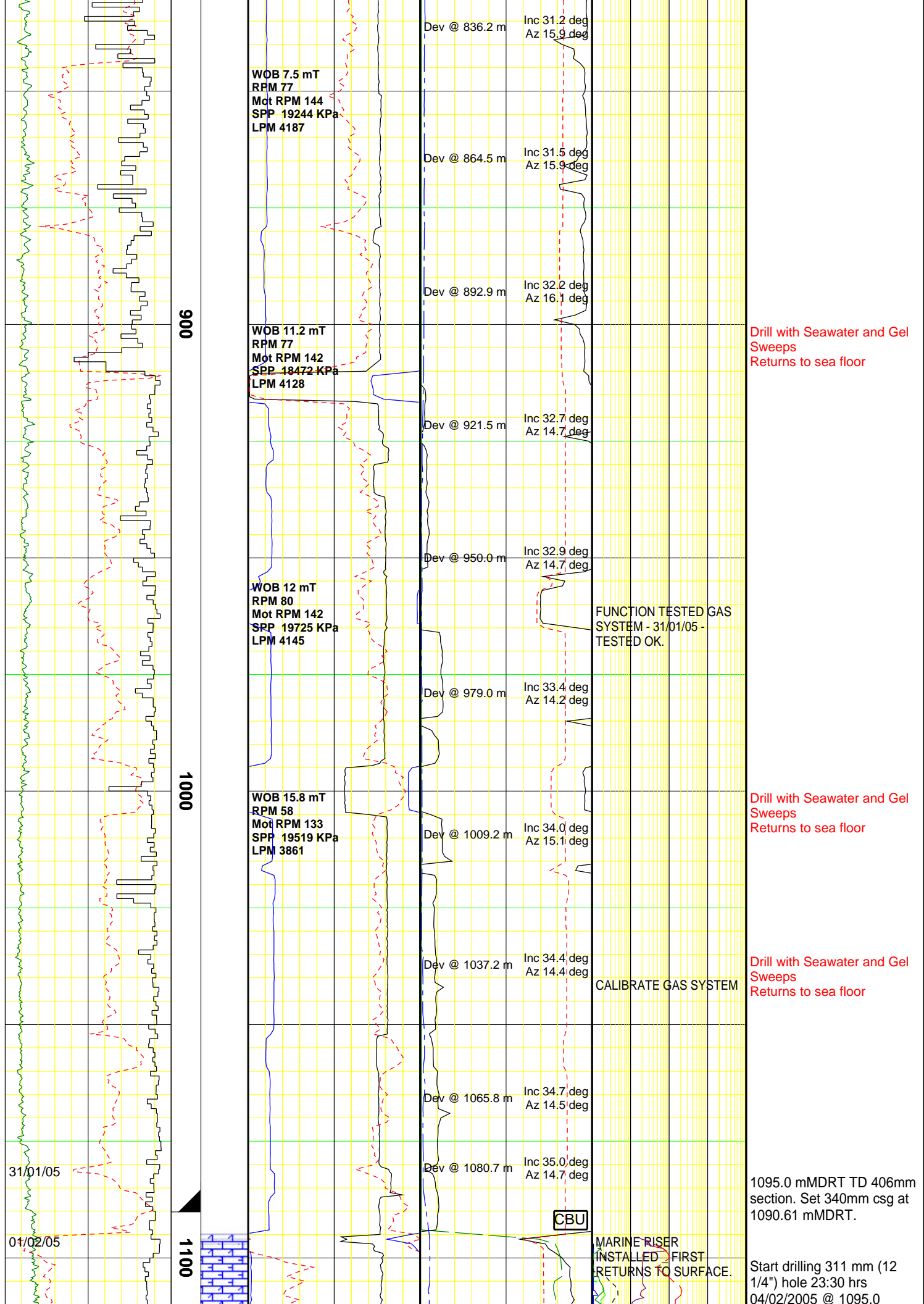
Kick off point @ 486.0  
mMDRT

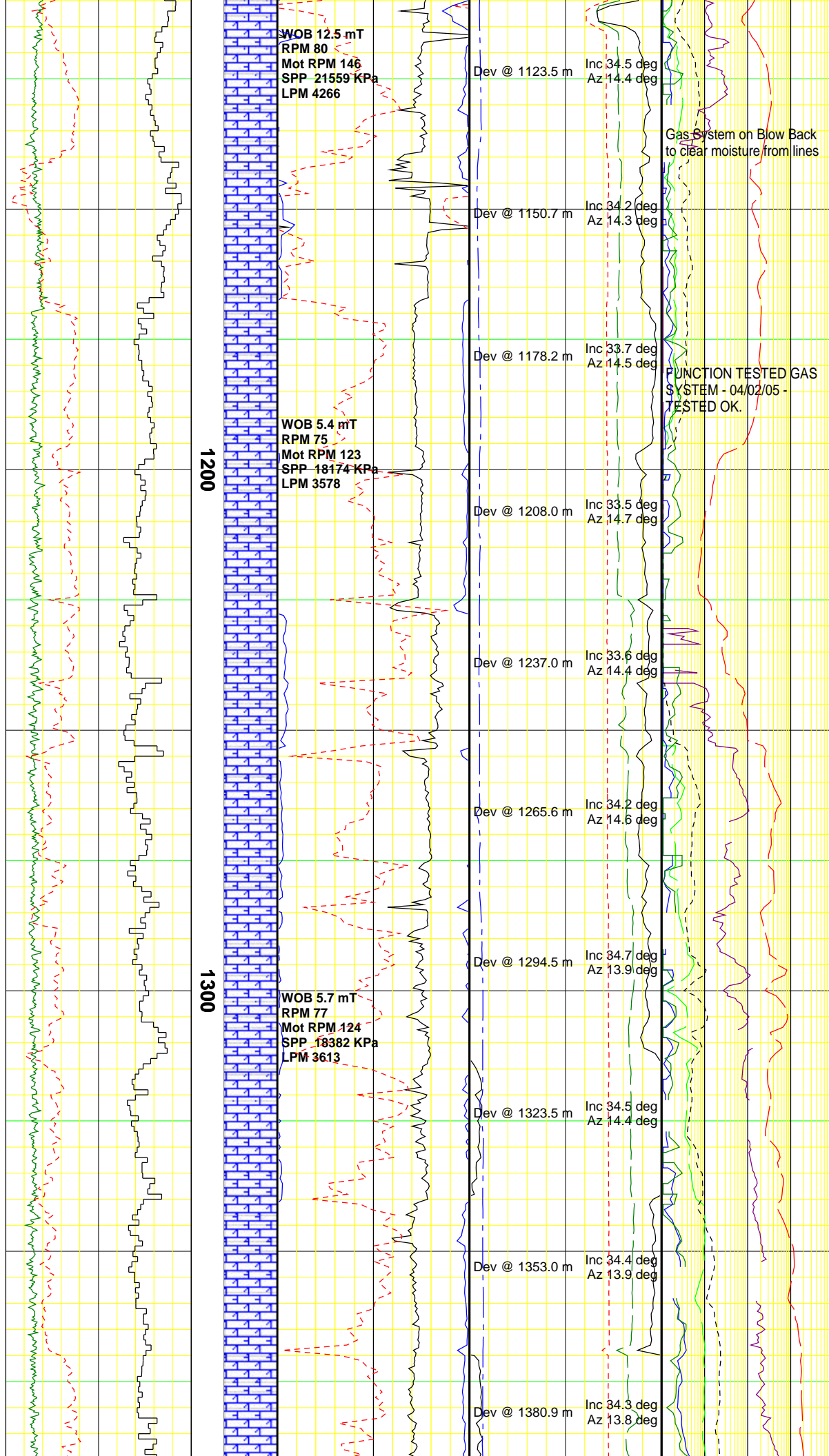


Drill with Seawater and Gel  
Sweeps  
Returns to sea floor

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Sweeps  
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mMDRT  
F.I.T 1090m MDRT with 8.6  
ppg (1.03 sg) mud = 14.37  
ppg or 1.726 sg or 815 psi  
EMW.

Displace hole to new mud  
system - KCl-Idcap-Glycol

MW: 1.20 sg  
FV: 55  
PV/YP 24/34  
Gels: 6/13  
O/W/S: 0/91/9  
Cl: 36000 mg/l

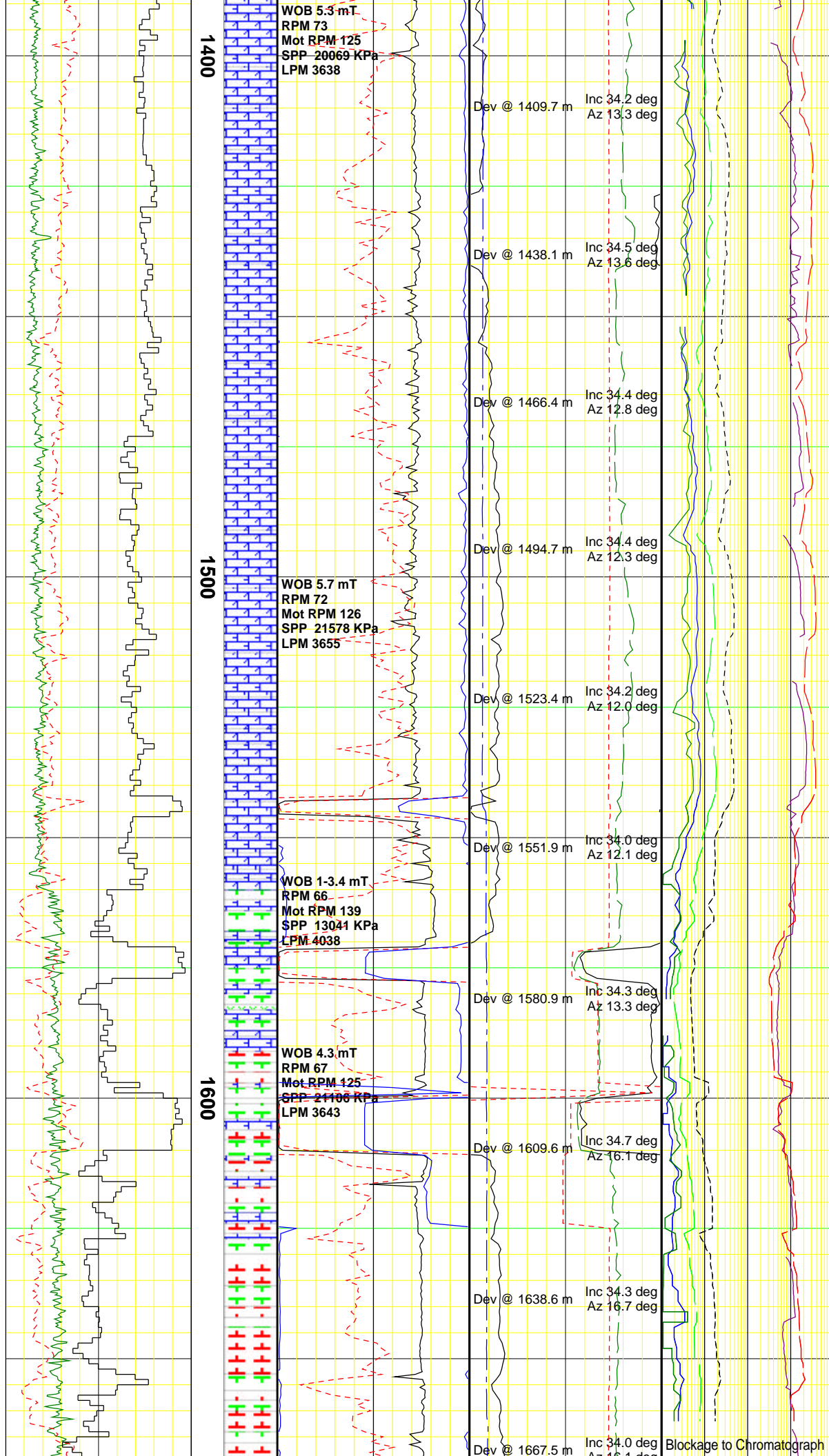
FUNCTION TESTED GAS  
SYSTEM - 04/02/05 -  
TESTED OK.

TAKE MWD surveys every  
stand down

Take SCR's

Take SCR's with pump1  
and pump 3





MW: 1.10 sg  
FV: 57  
PV/YP 15/32  
Gels: 12/19  
O/W/S: 0/91/9  
Cl: 30000 mg/l

Run Carbide @ 1655.0 m  
Theor Ann Vol = 713 bbls  
Act Ann Vol = 726 bbls

Act Ann Vol = 726 bbls  
Ave hole dia = 12.54"

06/02/05

Standpipe washout\_  
circulate and replace the  
same

1700

WOB 4.3 mT  
RPM 65  
Mot RPM 116  
SPP 21546 KPa  
LPM 3377

Dev @ 1696.0 m Inc 34.2 deg  
Az 16.4 deg

Trouble shoot and determine  
moisture contamination in  
Chromatograph

Dev @ 1724.7 m Inc 33.8 deg  
Az 16.0 deg

Work on Chromatograph -  
flushing with air to rid  
moisture.  
Total Gas readings still  
maintained.

Dev @ 1753.0 m Inc 34.2 deg  
Az 16.9 deg

Dev @ 1782.8 m Inc 34.1 deg  
Az 16.5 deg

WOB 3.5 mT  
RPM 77  
Mot RPM 125  
SPP 22159 KPa  
LPM 3663

Spare Chromatograph  
powered up, cycling to  
correct temperature before  
completing full calibration.

1800

Dev @ 1811.3 m Inc 34.4 deg  
Az 17.5 deg

Calibrate Chromatograph

Dev @ 1840.1 m Inc 34.5 deg  
Az 17.4 deg

Dev @ 1868.5 m Inc 34.2 deg  
Az 17.1 deg

1900

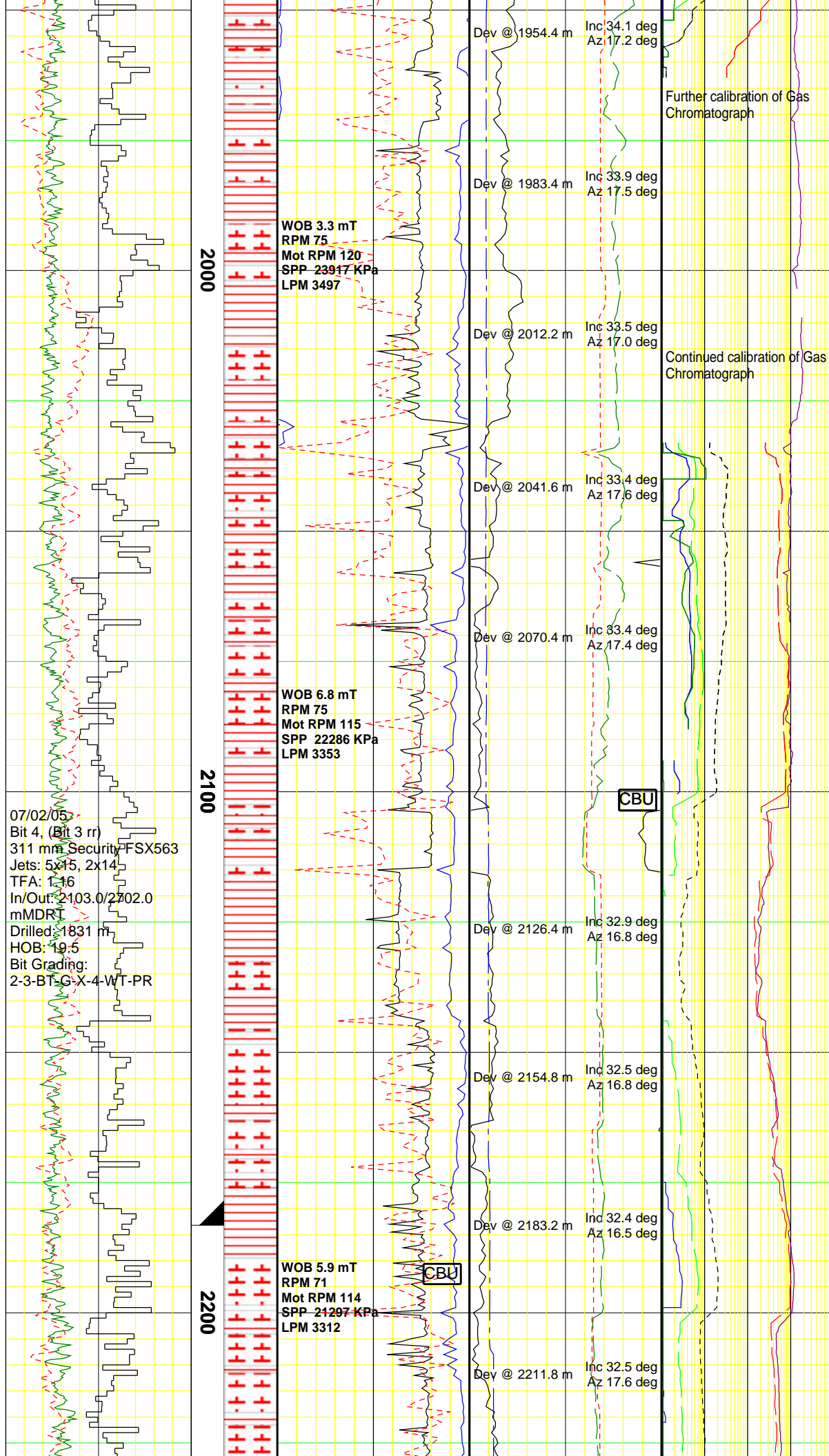
WOB 1.9 mT  
RPM 76  
Mot RPM 125  
SPP 24166 KPa  
LPM 3635

Dev @ 1897.1 m Inc 34.2 deg  
Az 16.7 deg

Dev @ 1926.1 m Inc 34.1 deg  
Az 16.9 deg

MW: 1.12 sg  
FV: 78  
PV/YP 8/41  
Gels: 11/16  
O/W/S: 0/92/8  
Cl: 30000 mg/l





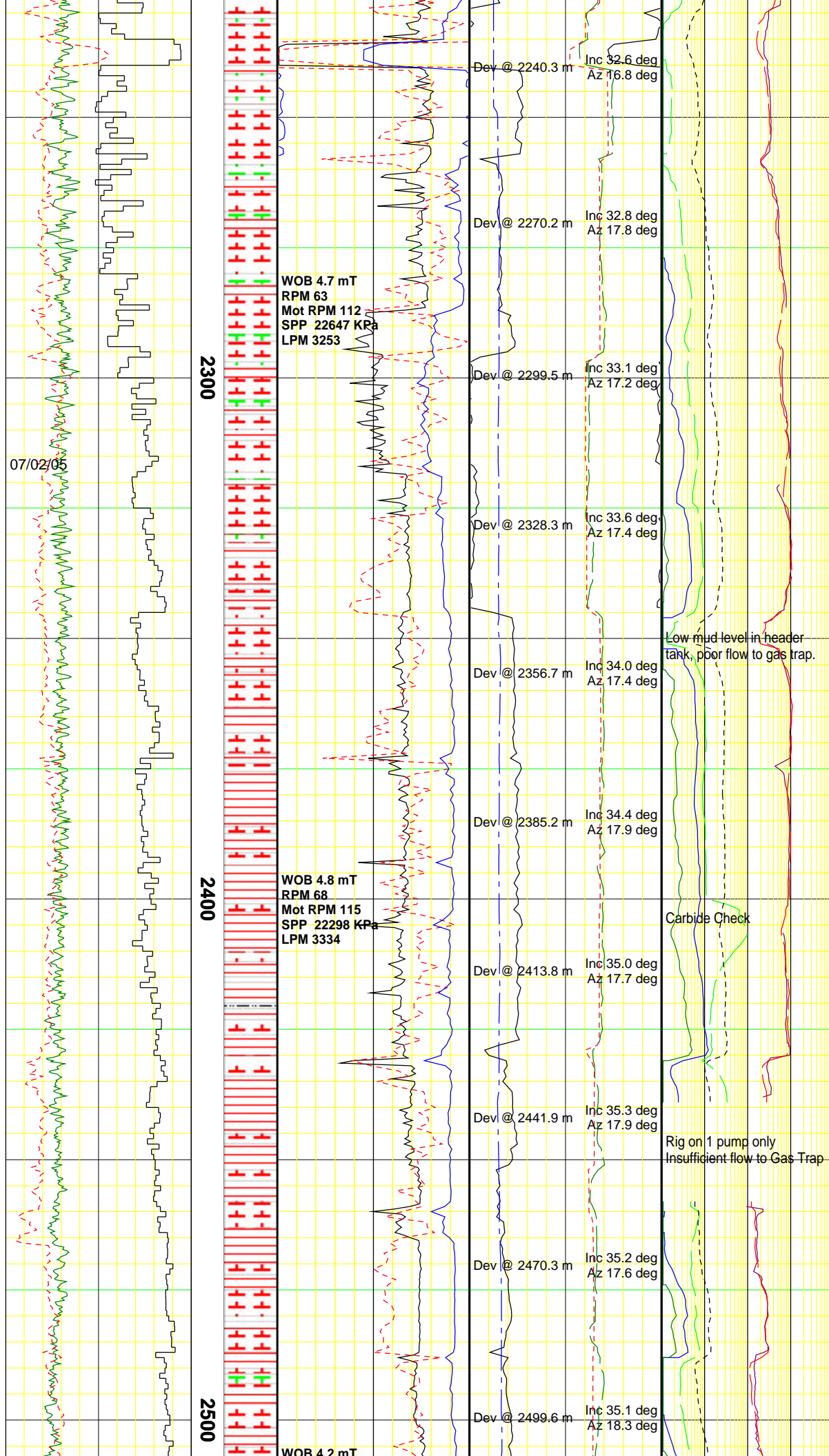
07/02/05  
Bit 4, (Bit 3 rr)  
311 mm Security FSX563  
Jets: 5x15, 2x14  
TFA: 1.16  
In/Out: 2103.0/2202.0  
mMDRT  
Drilled: 1831 m  
HOB: 19.5  
Bit Grading:  
2-3-BT-C-X-4-WT-PR

POOH @ 2103m MDRT  
and rest motor AKO. Wipe  
from 2103m to 1930m while  
POOH. Back ream/ wash  
tight spot 1930m to 1092m.

Wash and ream from  
1916m to 2103m while RIH.

MW: 1.12 sg  
FV: 65  
PV/YP 8/41  
Gels: 16/38  
O/W/S: 0/91/9  
Cl: 30000 mg/l

Drilled 311mm Hole  
2772.0m MDRT. Could not  
land casing at the planned  
depth. Set 244 mm Csg  
shoe @ 2184.0m MDRT



07/02/05

2300

2400

2500

WOB 4.7 mT  
RPM 63  
Mot RPM 112  
SPP 22647 KPa  
LPM 3253

WOB 4.8 mT  
RPM 68  
Mot RPM 115  
SPP 22298 KPa  
LPM 3334

WOB 4.2 mT

Dev @ 2240.3 m

Inc 32.6 deg  
Az 16.8 deg

Dev @ 2270.2 m

Inc 32.8 deg  
Az 17.8 deg

Dev @ 2299.5 m

Inc 33.1 deg  
Az 17.2 deg

Dev @ 2328.3 m

Inc 33.6 deg  
Az 17.4 deg

Dev @ 2356.7 m

Inc 34.0 deg  
Az 17.4 deg

Dev @ 2385.2 m

Inc 34.4 deg  
Az 17.9 deg

Dev @ 2413.8 m

Inc 35.0 deg  
Az 17.7 deg

Dev @ 2441.9 m

Inc 35.3 deg  
Az 17.9 deg

Dev @ 2470.3 m

Inc 35.2 deg  
Az 17.6 deg

Dev @ 2499.6 m

Inc 35.1 deg  
Az 18.3 deg

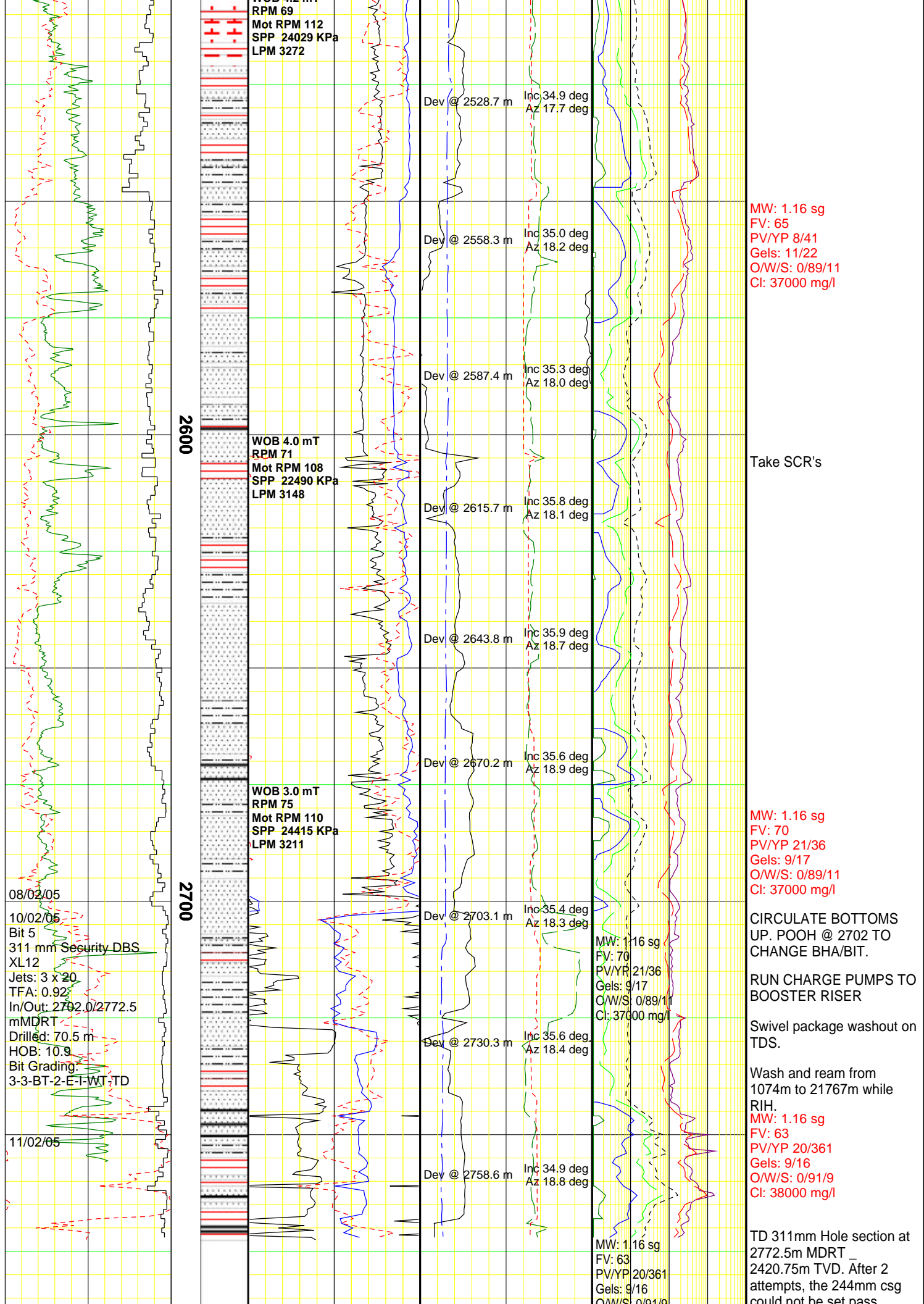
Low mud level in header tank, poor flow to gas trap.

Take SCR's

Run Carbide @ 2389.0 m  
Theor Ann Vol = 1123 bbls  
Act Ann Vol = 1147 bbls  
Ave hole dia = 12.54"

Carbide Check

Rig on 1 pump only  
Insufficient flow to Gas Trap



<div> <div>ROP</div> <div>m/hr</div> <div>200 0</div> </div>		<div> <div>Surface RPM</div> <div></div> <div>0 50 100</div> </div>		<div> <div>SPP</div> <div>KPa</div> <div>0 10K 20K</div> </div>		<div> <div>Gas Chromatograph</div> <div>ppm</div> <div> <div>C1 Avg</div> <div>C2 Avg</div> <div>C3 Avg</div> <div>C4 Tot Avg</div> <div>C5 Tot Avg</div> </div> </div>		<div> <div>Remarks</div> </div>
<div> <div>Gamma Ray</div> <div>api</div> <div>0 150 300</div> </div>		<div> <div>Total RPM</div> <div></div> <div>0 100 200</div> </div>		<div> <div>Flow In</div> <div>Lpm</div> <div>0 2.5K 5K</div> </div>		<div> <div>Flow Out</div> <div>Lpm</div> <div>10 100K</div> </div>		
<div> <div>Bit Weight</div> <div>mT</div> <div>0 20</div> </div>		<div> <div>Torque</div> <div>newton-metres</div> <div>0 10K 20K</div> </div>		<div> <div>Mud Weight Out</div> <div>SG</div> <div>1 1.5 2</div> </div>		<div> <div>Total Gas</div> <div>%</div> <div>0.001 10</div> </div>		