

# WIRELINER WORKSHOP

# INDUCED FLOW PROFILE

WELL ID: **ZND05**

COMPANY: NORTHAM PLATINUM LIMITED

COUNTRY: SOUTH AFRICA

PROVINCE: LIMPOPO

RUN ID: RUN 1 OF 1

FIELD: NORTHAM PLATINUM MINE

CONTRACTOR: WIRELINER WORKSHOP CC

LOG DATE: MAY 2019

WWS JOB REF: JOB CODE 729



Drill depth 1:	9.00 metres
Drill depth 2:	1,585.00 metres
Drill depth 3:	
Casing size 1:	NXC
Casing size 2:	
Casing size 3:	

Logger depth 1:	1,585.00 metres
Logger depth 2:	
Logger depth 3:	
Casing depth 1:	9.00 metres
Casing depth 2:	
Max rec temp:	52 deg Celcius

OH bit size 1:	4 inch
OH bit size 2:	NQ 76.4mm
OH bit size 3:	
Ops duration:	4 days approx.
Logger:	AM
Witness:	C. v Jaarsveld

Fluid level:	Varying around 535 metres
Fluid type:	Water with black oil
Fluid weight:	1.0 GM/CC
Surface datum:	Ground level
First run:	Temp, cond, gamma, caliper
Other logs:	DD, ATV, FWS, Flowmeter

Comment 1:

*Ran flowmeter upwards.*

Comment 2:

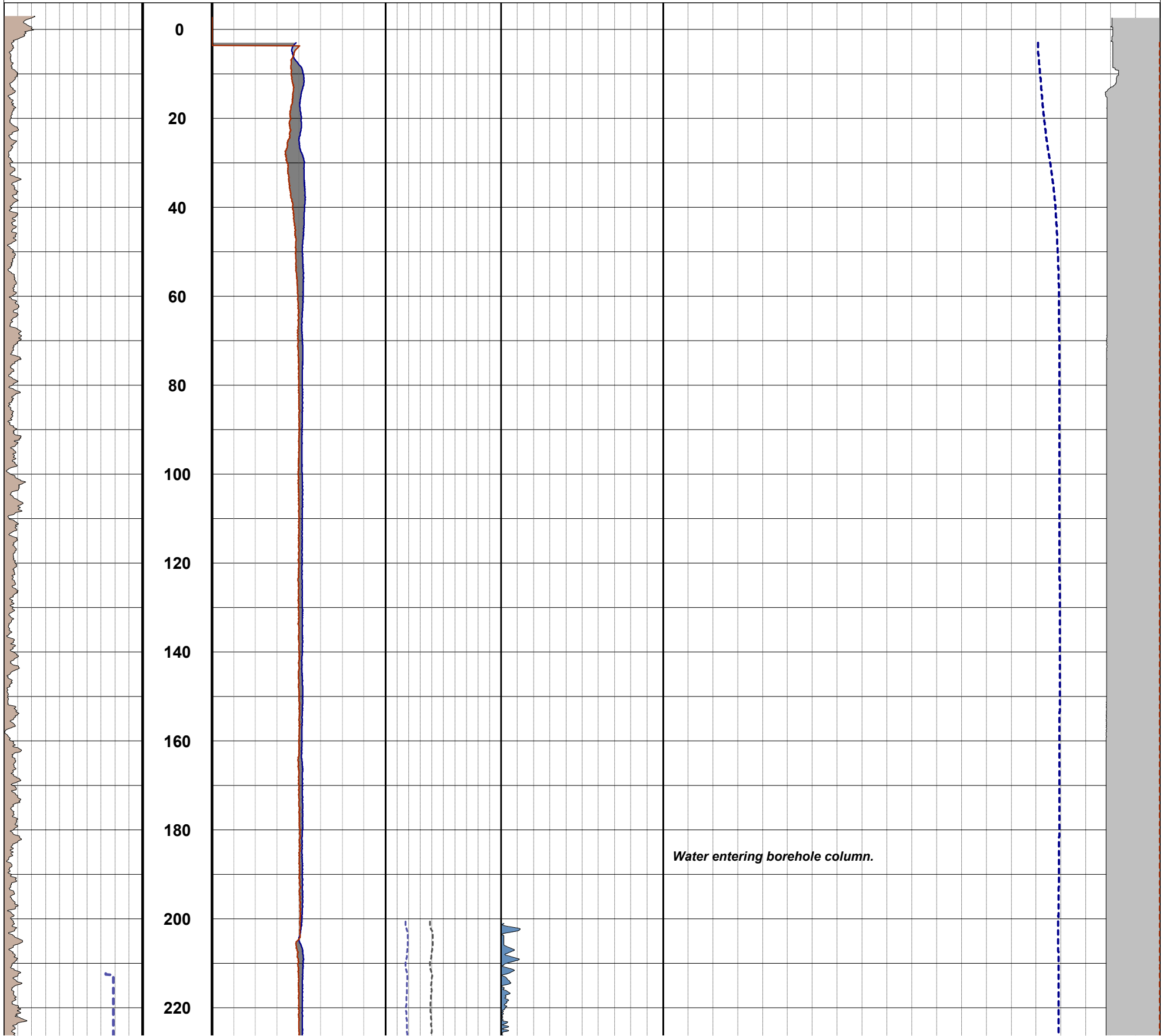
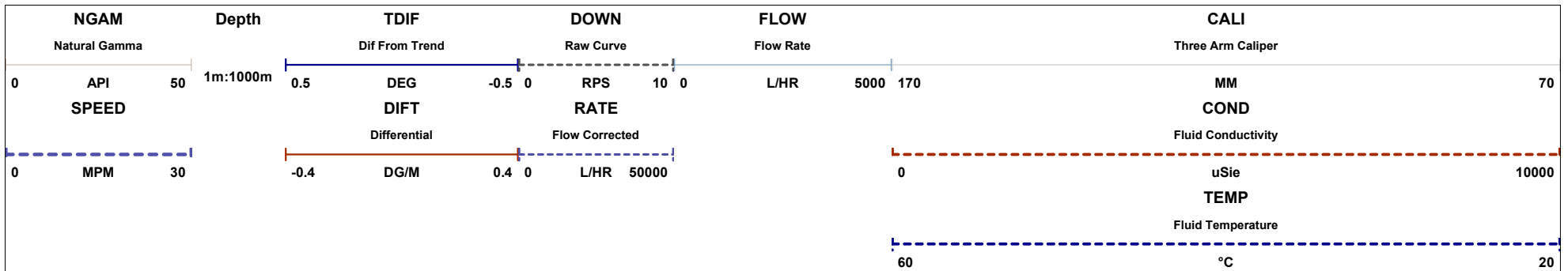
*Tool centralised to avoid oil slurry.*

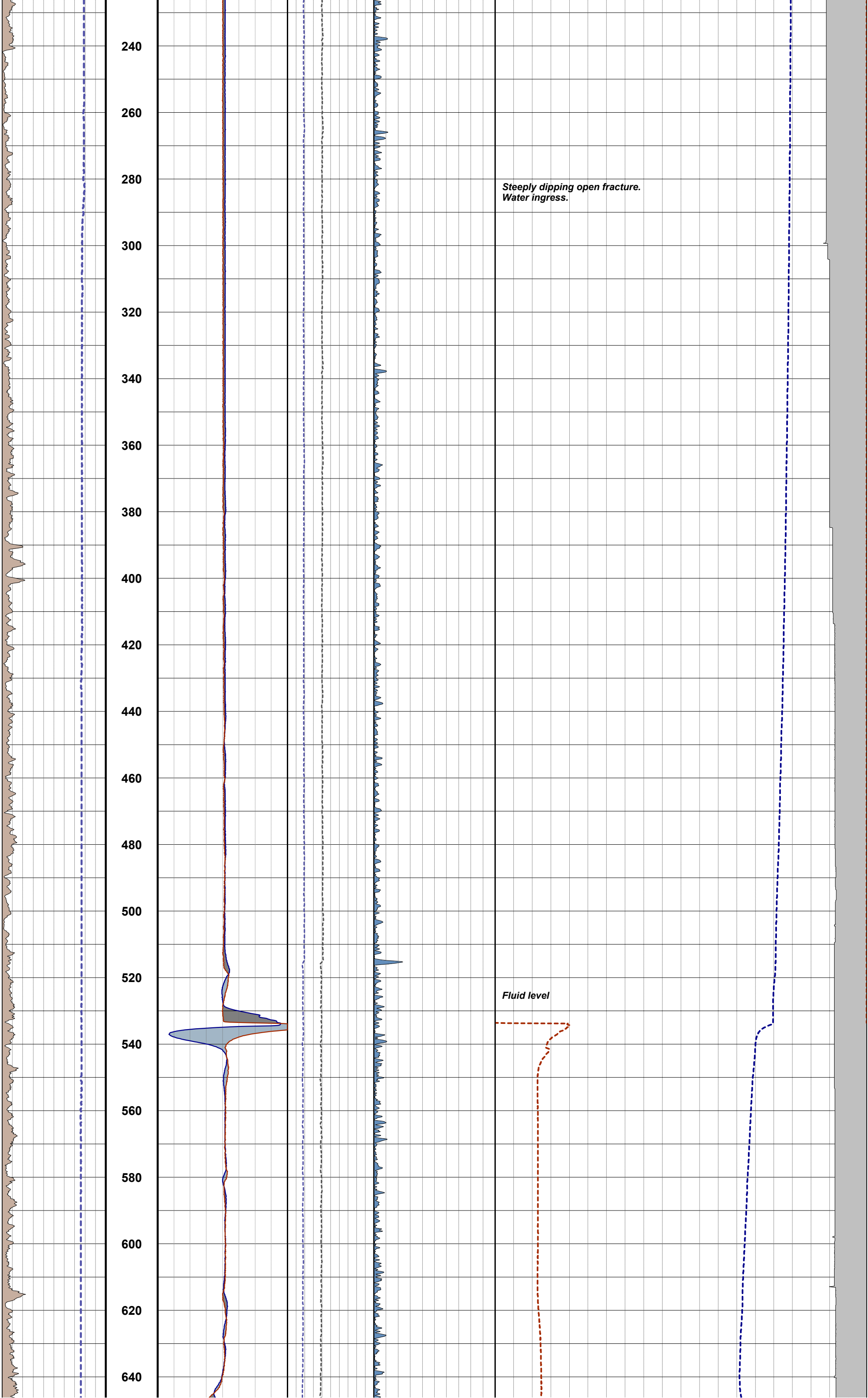
Comment 3:

*After run 1 it was apparent that the typical imbalance was 200 metres.*

Comment 4:

*One run only. Fluid level raised to apply pressure imbalance of about 20bar. No pump available so relied on gravity feed.*





660  
680  
700  
720  
740  
760  
780  
800  
820  
840  
860  
880  
900  
920  
940  
960  
980  
1000  
1020  
1040  
1060

*Open fracture*

*Major open fracture, aligned with current stress tensor.  
Possibly drilling-induced.*

*Steeply dipping open fracture.*

*Large fracture aperture. Taking water.*

