

# WIRELINE WORKSHOP

# ROCK STRENGTH ANALYSIS

WELL ID: **ZND05**

FROM FULL WAVE SONIC LOG

COMPANY: NORTHAM PLATINUM LIMITED

COUNTRY: SOUTH AFRICA

PROVINCE: LIMPOPO

RUN ID: RUN 1 OF 1

FIELD: NORTHAM PLATINUM MINE

CONTRACTOR: WIRELINE WORKSHOP CC

LOG DATE: MAY 2019

WWS JOB REF: JOB CODE 729



Drill depth 1:	9.00 metres	Logger depth 1:	1,581.00 metres	OH bit size 1:	4 inch	Fluid level:	Varying around 535 metres
Drill depth 2:	1,585.00 metres	Logger depth 2:		OH bit size 2:	NQ 76.4mm	Fluid type:	Water with black oil
Drill depth 3:		Logger depth 3:		OH bit size 3:		Fluid weight:	1.0 GM/CC
Casing size 1:	NXC	Casing depth 1:	9.00 metres	Ops duration:	4 days approx.	Surface datum:	Ground level
Casing size 2:		Casing depth 2:		Logger:	AM	First run:	Temp, cond, gamma, caliper
Casing size 3:	729	Max rec temp:	52 deg Celcius	Witness:	C. v Jaarsveld	Other logs:	DD, ATV, FWS, Flowmeter

Comment 1:	Log metreage severely curtailed by low water level. This was raised temporarily but FWS too slow to reach it.
Comment 2:	Log quality is good below 535 metres.
Comment 3:	Some severe problems with oil in borehole seeming to affect televiewer logs but not the full wave sonic tool.
Comment 4:	Sonic logs calculated by deduction and via semblance analysis.











