

AFREN ENERGY RESOURCES LIMITED

Nigeria



8 1/2" MPM823

Well: OKORO 5ST1&2

Field: OKORO

Rig: AD-9

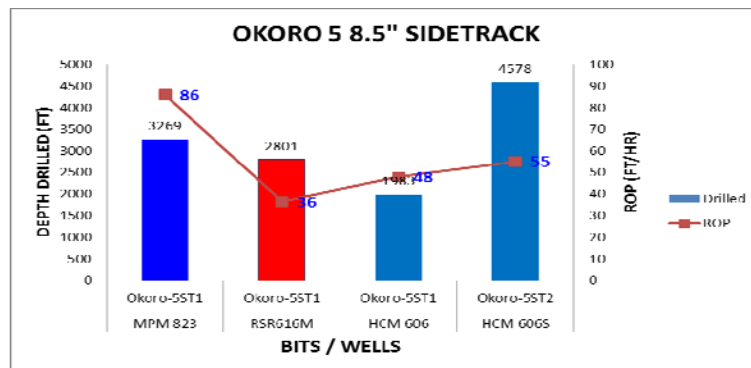
Geology: Sand and Shale sequence typical of Niger / Delta Geology

Objective: Drill out cement and drill directionally to sidetrack the well.

Results: *DDS Technology increases ROP by 60% over the closest bit while steering compared to competitors' leading products.*

July 2012

Well	Bit	MANF.	S/NO	Blade/Cutter	In	Out	Ftg	ROP	Driver	Dull Grading
Okoro 5ST1	MPM823	Diamart	S1B2852	8 / 13mm	4515	4971	456	91	7" SLB Power Drive	-
Okoro 5ST1	MPM823	Diamart	S1B2852	8 / 13mm	4971	7784	2813	85	7" SLB Power Drive	0-2-BT-S-X-I-NO-HP
Okoro 5st1	RSR616M	RHY	E150100	6 / 16mm	7784	10,392	2608	41	7" SLB Power Drive	-
Okoro 5st1	RSR616M	RHY	E150100	6 / 16mm	1703	1896	193	15	7" SLB Power Drive	5-1-BT-1-X-I-FC-HP
Okoro 5st1	HCM606	HCC	7115255	6 / 19mm	10440	12325	1885	47	7" SLB Power Drive	1-6-BT-N-X-I-CT-TD
Okoro 5st2	HCM606	HCC	7013146	6 / 19mm	5222	9800	4578	55	7" SLB Power Drive	1-1-WT-A-X-I-NO-TD



BIT DETAILS	
BIT TYPE	MPM823
S/N	S1B2852
BLADES	8
GAGE	3.5
CUTTERS SIZE	13 mm
CUTTERS TYPE	Meteor

The bit features High Spiral- a revolutionary technology that allows for excellent tool face control, increases stability without compromising cutting efficiency. In addition High Spiral designs provide smooth torque response for directional application.