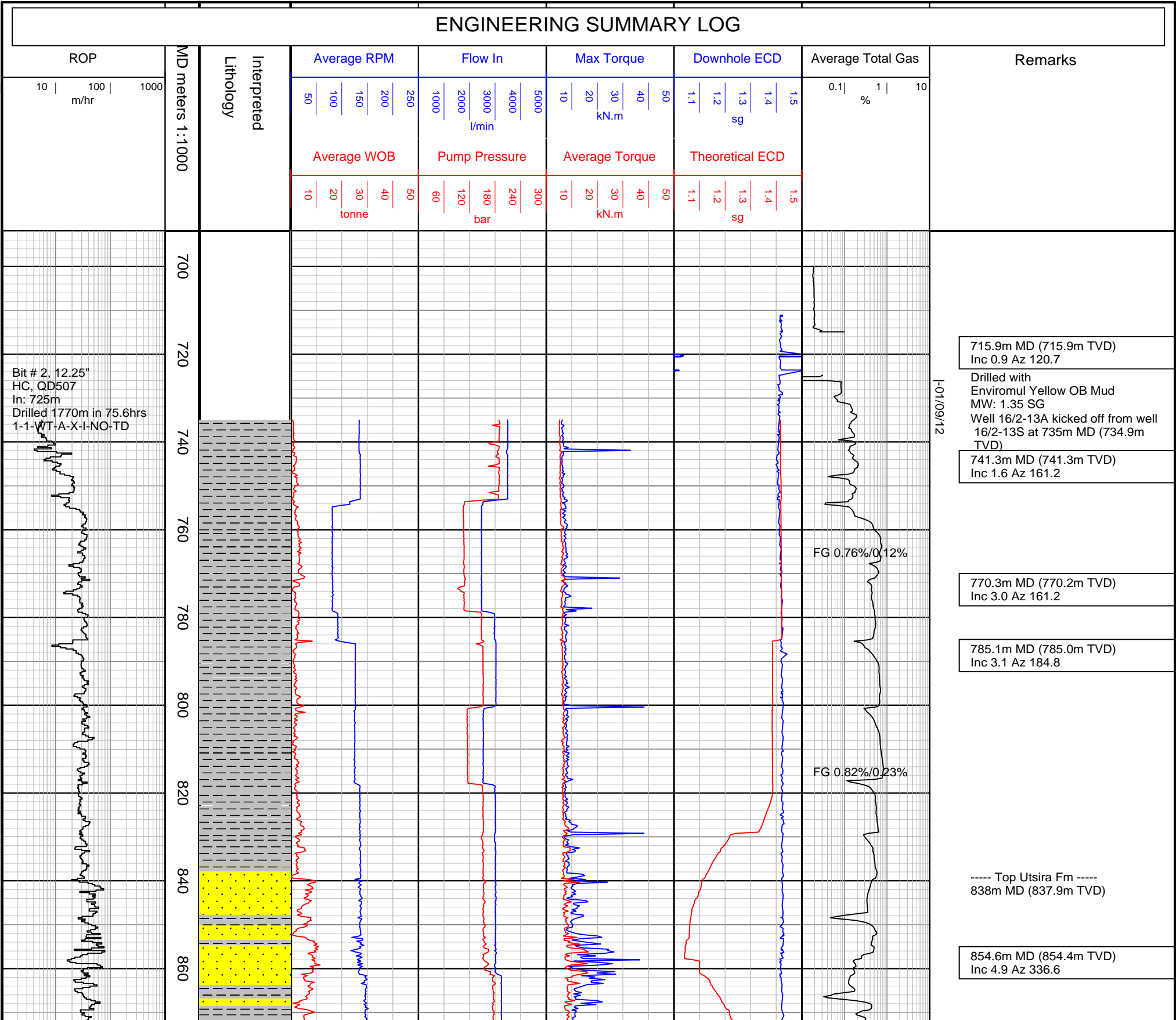
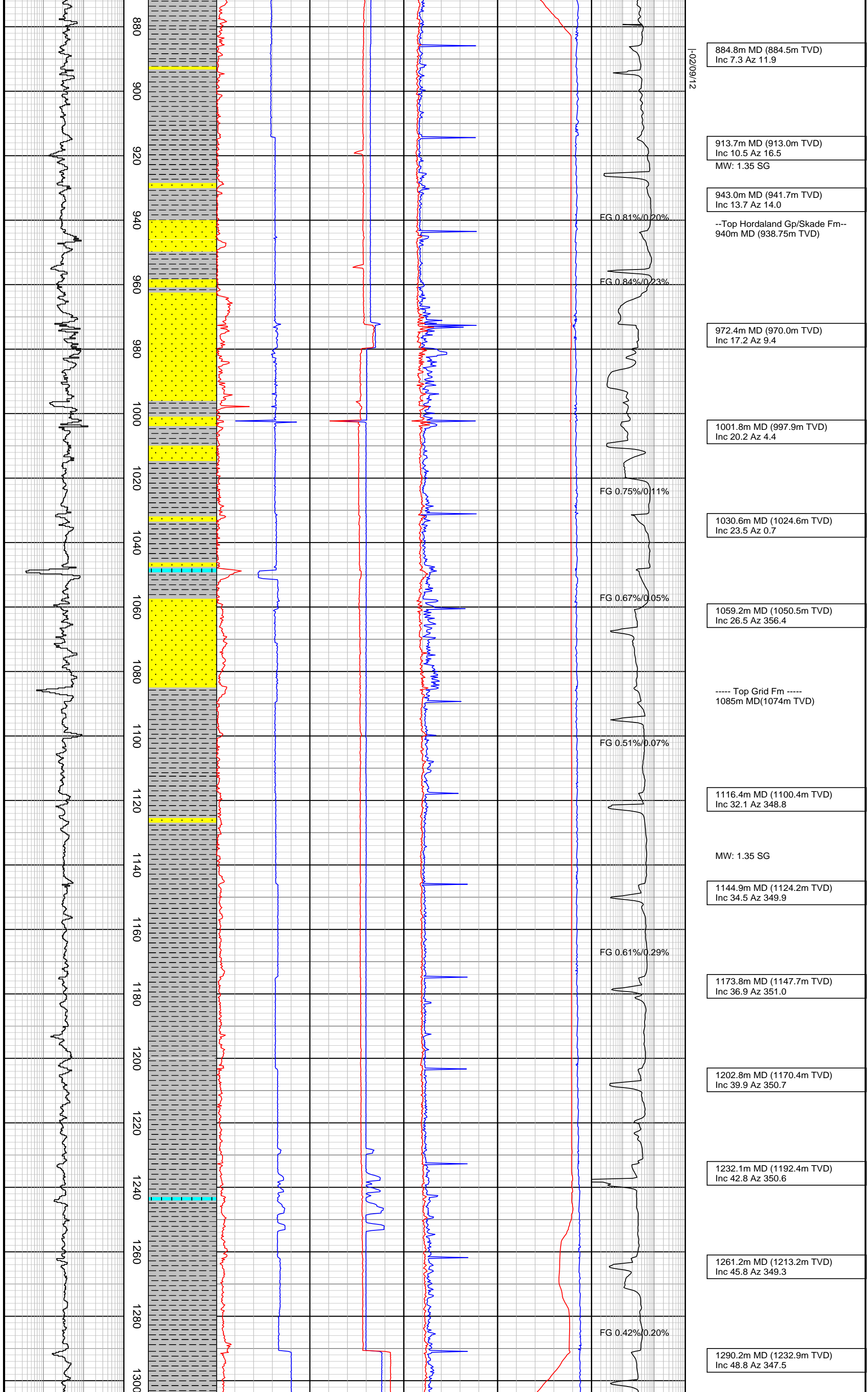
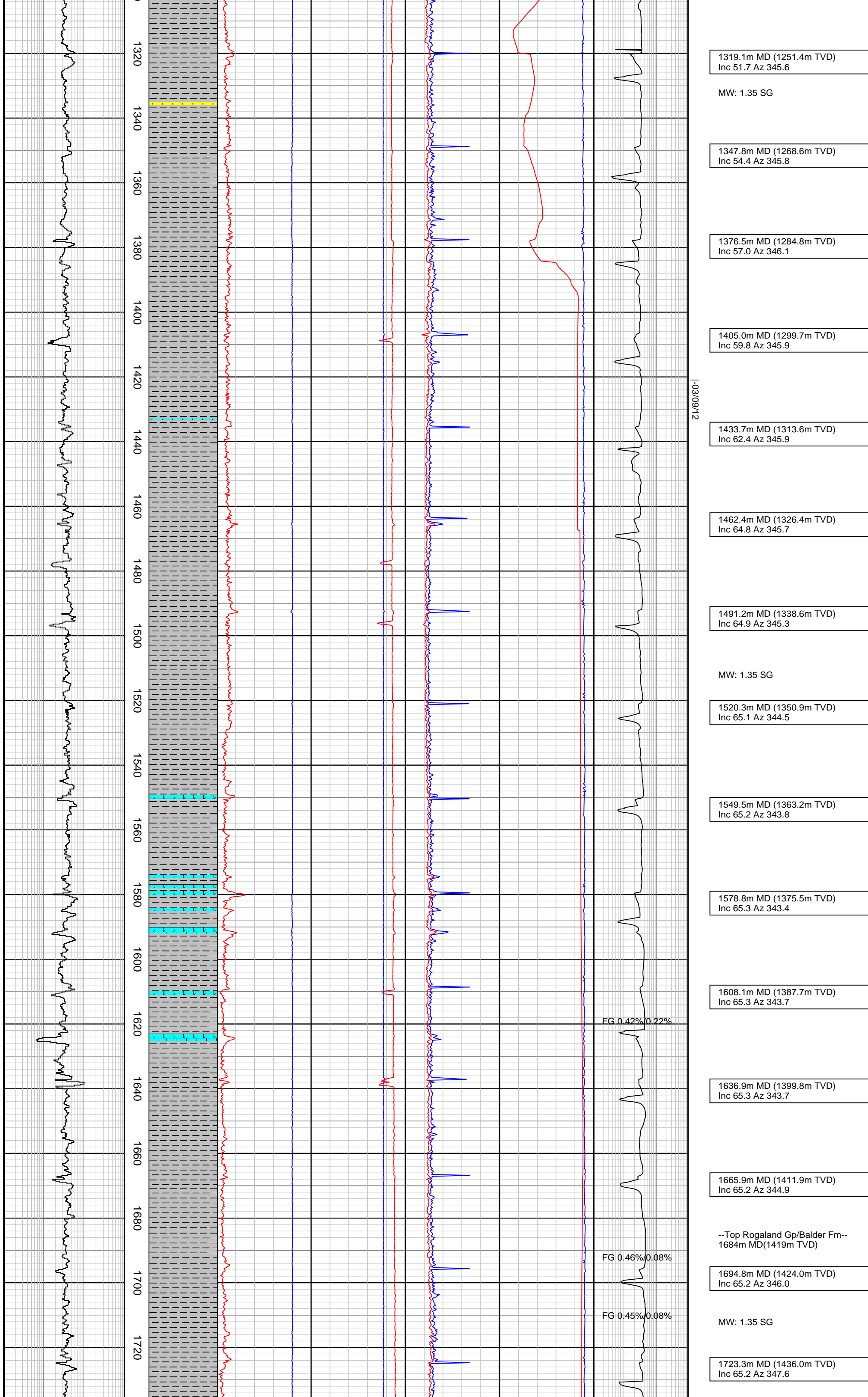


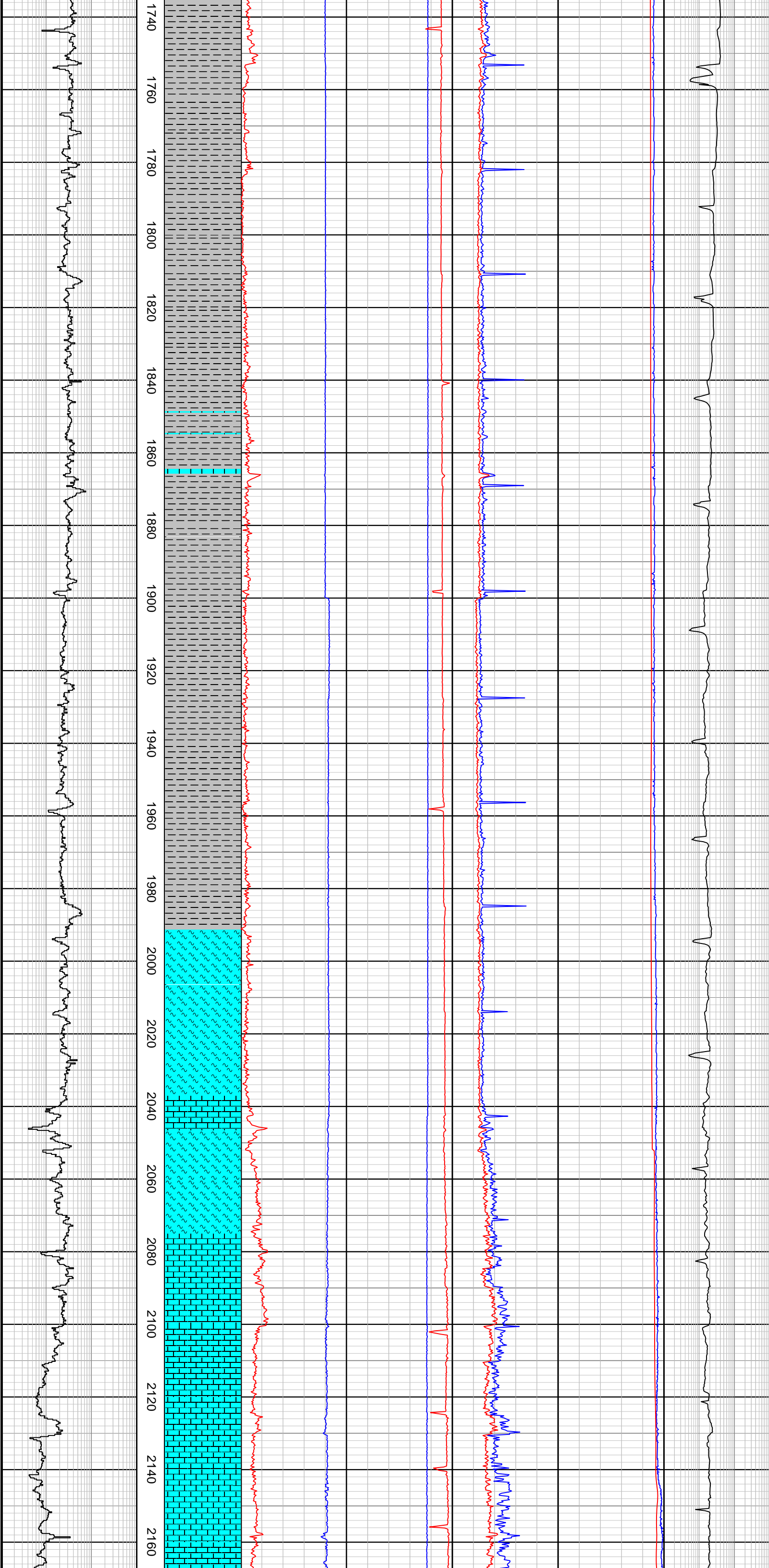
Engineering Summary Log

			BOREHOLE RECORD						BAKER HUGHES LOG SUITE				
Company	Lundin Norway AS		12.25 in.	To	2495 m	/	1849 m	TVD	Formation Evaluation Log				
Well	16/2-13 A		8.5 in.	To	2776 m	/	2101.7 m	TVD	Engineering Summary Log				
Field	Johan Sverdrup			To		/		TVD	Gas Ratio Log				
	Norway			To		/		TVD	Drilling Data Pressure Log				
Well Location:	58° 49' 58.455" N								ABBREVIATIONS				
	2° 39' 10.263" E								NB	New Bit	SWG	Swab Gas	
NOR Number	2139								RRB	Rerun Bit	SVG	Survey Gas	
Spud Date	01/Sept/12								CB	Core Bit	GWR	Gas Water Ratio	
									WOB	Weight On Bit	MW	Mud Density	
RKB-Fluids	24 m								RPM	Revs Per Minute	V	Funnel Viscosity	
RKB-Seabed	140 m								FLC	Flow Check	F	Filtrate API	
Contractor	Transocean Drilling Co								PR	Poor Returns	FC	Filter Cake	
Rig	Transocean Arctic								NR	No Returns	PV	Plastic Viscosity	
Installation Type	Semi-Submersible								LAT	Logged After Trip	YP	Yield Point	
Depth Out	2776 m								BG	Background Gas	SOL	Solids	
Vdepth Out	2776 m								FG	Formation Gas	SD	Sand	
Completion Status	n/a								TG	Trip Gas	CI	Salinity	
LOG INTERVAL									WTG	Wiper Trip Gas	OWR	Oil Water Ratio	
Depth In	735 m	To	2776 m							CG	CG	ES	Electric Stability
MWD Start	735 m	To	2776 m							SYMBOLS			
Scale	1:1000								<div><div><div></div><div>Casing shoe</div></div><div><div></div><div>Test Interval</div></div></div>				
BAKER HUGHES CREW			QUALIFIER SYMBOLS						<div><div><div></div><div>Core Interval</div></div><div><div></div><div>No Recovery</div></div></div>				
Unit No.	427		<div><div><div></div><div>Calcareous</div></div><div><div></div><div>Dolomitic</div></div><div><div></div><div>Mica</div></div><div><div></div><div>Kaolinite</div></div><div><div></div><div>Pyrite</div></div></div>						<div><div><div></div><div>Wireline test</div></div><div><div></div><div>SideWall Core</div></div><div><div></div><div>Sidewall Core</div></div><div><div></div><div>No Recovery</div></div></div>				
Data Engineers	S.Pettersen	A.Nygaard	<div><div><div></div><div>Glauconitic</div></div><div><div></div><div>Carbonaceous</div></div><div><div></div><div>Fossil frags</div></div><div><div></div><div>Chert</div></div><div><div></div><div>Tuff</div></div></div>										
	A.Strand	T.Thomas	LITHOLOGY SYMBOLS										
Logging Engineers	T.Halhjem	I.Gundby	<div><div><div></div><div>Limestone</div></div><div><div></div><div>Dolomite</div></div><div><div></div><div>Chalk</div></div><div><div></div><div>Sandstone</div></div><div><div></div><div>Siltstone</div></div></div>										
M.Griffin	E.Kalstø	T.Baghirov	<div><div><div></div><div>Shale</div></div><div><div></div><div>Claystone</div></div><div><div></div><div>Coal</div></div><div><div></div><div>Halite</div></div><div><div></div><div>Anhydrite</div></div></div>										









I-04/09/12

1752.1m MD (1448.1m TVD) Inc 65.3 Az 348.3 ----- Top Sele Fm ----- 1756m MD(1450m TVD)
1780.9m MD (1460.1m TVD) Inc 65.2 Az 348.4 ----- Top Lista Fm ----- 1782m MD(1460m TVD)
1810.2m MD (1472.4m TVD) Inc 65.2 Az 348.6
1839.1m MD (1484.5m TVD) Inc 65.2 Az 348.5
1868.3m MD (1496.8m TVD) Inc 65.2 Az 348.7
1897.4m MD (1509.0m TVD) Inc 65.3 Az 348.8 MW: 1.35 SG
1926.4m MD (1521.1m TVD) Inc 65.3 Az 348.2
1955.1m MD (1533.1m TVD) Inc 65.3 Az 348.3
1983.9m MD (1545.1m TVD) Inc 65.2 Az 347.9 ----- Top Våle Fm ----- 1991m MD(1548m TVD)
2012.6m MD (1557.2m TVD) Inc 65.2 Az 348.0
2041.3m MD (1569.2m TVD) Inc 65.2 Az 347.7 --Top Shetland Gp/Ekofisk Fm-- 2037m MD(1567m TVD) 20% cavings from Lista Fm Increase MW to 1.44 SG
2070.6m MD (1581.5m TVD) Inc 65.2 Az 347.4 ----- Top Tor Fm ----- 2075m MD(1583m TVD)
2099.7m MD (1593.7m TVD) Inc 65.3 Az 347.6 20% cavings from Lista Fm
2128.3m MD (1605.8m TVD) Inc 64.7 Az 347.2
2156.8m MD (1618.6m TVD) Inc 62.0 Az 347.5

