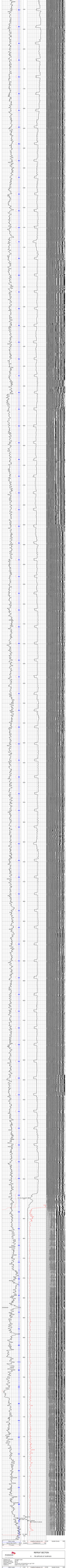
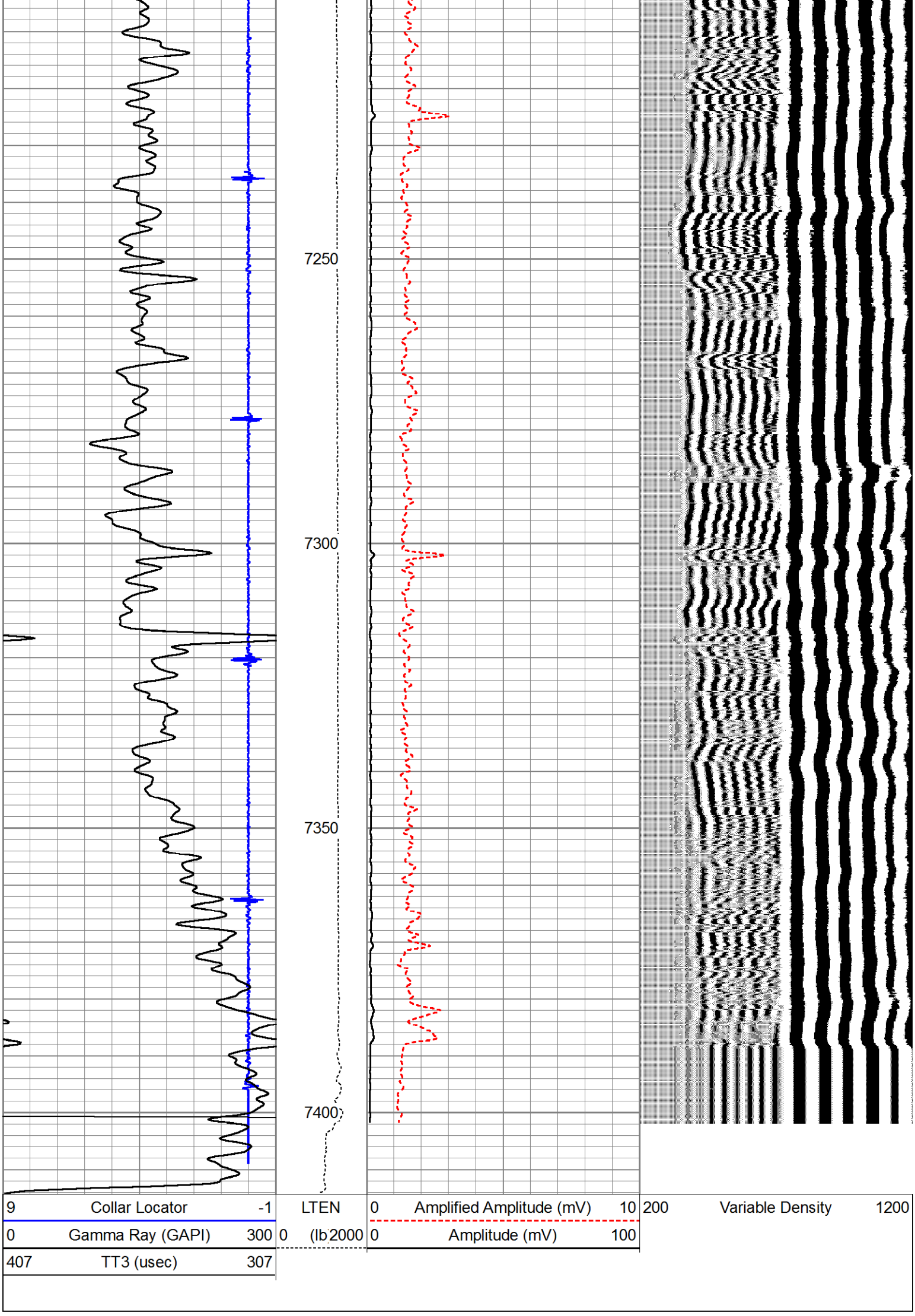
Company	Tullow Oil plc		
Well	Tullow Ghana Limited		
Field	Tullow Ghana Limited		
Location	Ghana		
Date	2010-Jan-01		
Time	00:00:00		
Depth Reference	Rotary Table		
Elevation	0.00 m		
Log Interval	0.00 m	0.00 m	
Casing Shoe	0.00 m	0.00 m	
Bit Size	0.00 m	0.00 m	
Max Deviation	0.00 m	0.00 m	
Mud Type	Water Based Mud		
Mud Density	0.00 kg/m³	0.00 kg/m³	
Mud Viscosity	0.00 s	0.00 s	
Mud Resistivity	0.00 Ωm	0.00 Ωm	
Mud Resistivity Temp.	0.00 °C	0.00 °C	
Mud Resistivity Source	Measured	Measured	
Mud Resistivity Type	Mud	Mud	
Mud Resistivity Method	Measured	Measured	
Mud Resistivity Accuracy	0.00 %	0.00 %	
Mud Resistivity Precision	0.00 %	0.00 %	
Mud Resistivity Calibration	0.00	0.00	
Mud Resistivity Temperature Correction	0.00	0.00	
Mud Resistivity Pressure Correction	0.00	0.00	
Mud Resistivity Salinity Correction	0.00	0.00	
Mud Resistivity Other Correction	0.00	0.00	
Mud Resistivity Total Correction	0.00	0.00	
Mud Resistivity Corrected	0.00	0.00	
Mud Resistivity Uncorrected	0.00	0.00	
Mud Resistivity Source	Measured	Measured	
Mud Resistivity Type	Mud	Mud	
Mud Resistivity Method	Measured	Measured	
Mud Resistivity Accuracy	0.00 %	0.00 %	
Mud Resistivity Precision	0.00 %	0.00 %	
Mud Resistivity Calibration	0.00	0.00	
Mud Resistivity Temperature Correction	0.00	0.00	
Mud Resistivity Pressure Correction	0.00	0.00	
Mud Resistivity Salinity Correction	0.00	0.00	
Mud Resistivity Other Correction	0.00	0.00	
Mud Resistivity Total Correction	0.00	0.00	
Mud Resistivity Corrected	0.00	0.00	
Mud Resistivity Uncorrected	0.00	0.00	

Tullow Ghana Limited
Tullow Ghana Limited
Tullow Ghana Limited
Ghana
2010-Jan-01
00:00:00
Rotary Table
0.00 m
0.00 m
0.00 m
0.00 m
0.00 m
Water Based Mud
0.00 kg/m³
0.00 s
0.00 Ωm
0.00 °C
Measured
Mud
Measured
0.00 %
0.00 %
0.00
0.00
0.00


REPEAT SECTION
TO 100 MILLI SECONDS
Pulse Length: 10 ms
Vibrators: 4
Sweep Type: Linear
Sweep Length: 10 - 100 Hz
Sweep Taper: 0.5 Hz Cosine
Correlation: Yes
Source Array: 1 x 4
Receiver Array: 1 x 6
Receiver Spacing: 10 m
Source Spacing: 10 m
Fold: 6
Recording Time: 10 s
Sample Rate: 2 ms
Recording Filter: 10 - 100 Hz
Source Type: Vibroseis
Vibrator Type: Mertz 18
Vibrator Force: 18 tons
Vibrator Drive Level: 80 %
Receiver Type: Geospace GS-11D
Receiver Array Type: Linear
Receiver Array Length: 50 m
Source Array Type: Linear
Source Array Length: 50 m
Geophone Type: Geospace GS-11D
Geophone Frequency: 10 Hz
Geophone Sensitivity: 28.8 V/m/s
Geophone Damping: 0.7
Geophone Resistance: 370 Ohm
Geophone Number: 1
Geophone Spacing: 10 m
Geophone Array: 1 x 6
Geophone Array Length: 50 m
Geophone Array Type: Linear
Geophone Array Spacing: 10 m
Geophone Array Number: 1
Geophone Array Type: Linear
Geophone Array Length: 50 m



Calibration Report

Database File:	strongp21-7ji.db
Dataset Pathname:	pass15
Dataset Creation:	Thu Feb 05 10:59:36 2015 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	51013	
Tool Model:	probe 2.75	
Performed:	Thu Feb 23 11:03:07 2012	
Calibrator Value:	1400.0	GAPI
Background Reading:	26.8	cps
Calibrator Reading:	1120.0	cps
Sensitivity:	0.9000	GAPI/cps

Cement Bond Log Calibration Report

Serial Number:	050215		
Tool Model:	Probe		
Performed:	Thu Feb 05 10:31:56 2015		
Depth:	2394.77	ft	
Casing Diameter:	5.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	0	0	mV
Calibrated Amplitude:	81	81	mV
Reading at Signal Zero:	-0.02	-0.02	V
Reading in Free Pipe:	1.36494	1.4678	V
Gain:	58.4862	54.4429	
Offset:	1.16972	1.08886	

PIONEER

Pioneer Energy Services

Company	Kerr McGee Oil And Gas
Well	Strong P 21-7 JI
Field	Wattenberg
County	Weld
State	CO