

OPERATOR: STATOIL
WELL: 15/9-F-7
WELLBORE: 15/9-F-7 2889-P
FIELD: VOLVE
RIG: MAERSK INSPIRER
COUNTRY: NORWAY

Report

WLC_PETROPHYSICAL_COMPOSITE_1.LIS

Prepared by: LOGTEK AS
Date: 24-JAN-2008

The WLC_PETROPHYSICAL_COMPOSITE_1.LIS has been created in accordance with the NPD “Guidelines to the Petroleum Regulations/REPORTING REQUIREMENTS FOR DIGITAL WELL DATA (Drilling Regulations, Section 12)”.

http://www.npd.no/regelverk/R2002/B_OG_B_DIGITAL_RAPPORTERING_E.HTM#Additional_Composited_Data

Purpose

To preserve ‘specialist’ composited data curves that may be created for a well but which do not fall into the ‘standard’ Composite (Section 3.1) or the ‘Interpreted Data Input’ data sets (described in Section 4.1). These data may have additional work done such as environmental or bed thickness corrections.

This data set would normally be used by Petrophysicists. Operators are strongly recommended to report this data set in order to preserve value-added work.

Quality

Similar quality guidelines apply to the compositing work as described in Section 3.1.3 above. All work that is carried out must also be documented in an Information File.

Operationally, it is expected that both the ‘standard’ Composite Log and this ‘specialized’ Composite Log would normally be created in the same process but split into 2 data sets for reporting purposes. This ensures that the same depth shifting is applied to both data sets – an important quality requirement.

Content

Data that are not part of the ‘Composited’ or ‘Interpretation Input’ data sets. This may include

- additional composited resistivity, NMR or other specialized curve data
- composited data at high sampling rates for thin-bed analysis
- a good guide is to include all ‘presentation curves’ from log prints (apart from those already included in the ‘standard’ composite). If quality curves such as Tension or Cable Speed are included (not a requirement), information must be included in the Information Files to show which data curves they refer to.

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MWD data plotted and verified to prints.

MWD PowerPulse, run 6:

Gaps in real time data interpolated on plot.

Curves renamed:

In composite	On field print

GRA	GRA_ARC
ROP5	ROP5_RM
SHK1	SHK1_ARC
TABA	TAB_ARC_RES

Depth units are meters.

Quality comments:

MWD PowerPulse, run 6:

Data above 202.0 m logged in casing (depth from MWD log heading).

Logger's remarks:

All depths are referenced to drillers depth and checked at least every stand.

All data is Real Time.

Data acquired while reaming from 240 to 284.2 m, all other data acquired while drilling.

Gamma Ray measurement is environmentally corrected for mud weight, bit size and collar thickness.

Missing Gamma Ray data from 882 m to 891.4 m due to bad MWD signal while pumping Hi-Vis pill.

17 1/2 in. section TD at 915 m.

MWD ARC, run 7:

Data above 907.7 m logged in casing (depth from MWD log heading).

Logger's remarks:

All depths are referenced to drillers depth and checked at least every stand.

All data from tool memory.

All data acquired while drilling.

Gamma Ray measurement is environmentally corrected for mud weight, bit size and collar thickness.

Resistivity measurements are borehole compensated and environmentally corrected for bit size, mud resistivity and temperature.

12 1/4 in. section TD at 1083 m.

Editing on WLC_PETROPHYSICAL_COMPOSITE_1.LIS:

MWD PowerPulse, run 6:

Repeated values on top and bottom of GR curve have been removed.

Gaps in real time data less than 1.5 m have been interpolated in order to match plots.

Depth shifts:

None

CURVE SUMMARY, file WLC_PETROPHYSICAL_COMPOSITE_1.LIS:

File #2, increment 0.1524:

Main Services	Curve no.	Run	Date (start)	Interval (meters)	Merge Depth (meters)	Dept shifted	Edited
MWD ARC	A28H	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	A34H	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	A40H	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	GRA	7	01-OCT-07	899.8-1077.9		No	No
MWD PowerPulse	GRM1#	6	24-SEP-07	242.6-881.9		No	Yes
MWD ARC	P16H	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	P16L	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	P22H	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	P22L	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	P28H	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	P28L	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	P34H	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	P34L	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	P40H	7	01-OCT-07	899.8-1078.1		No	No
MWD ARC	P40L	7	01-OCT-07	899.8-1078.1		No	No
MWD PowerPulse	ROP5#	6	24-SEP-07	239.7-914.7	914.9	No	Yes
MWD ARC	ROP5	7	01-OCT-07	914.9-1083.6		No	No
MWD ARC	SHK1	7	01-OCT-07	899.8-1077.0		No	No
MWD ARC	TABA	7	01-OCT-07	899.8-1078.1		No	No

Real Time data

Definitions:***Dynamic depth shift** - variable depth shifting (stretch and pull) as opposed to linear depth shifting.****Linear depth shift** - Constant depth shift through a certain depth interval.****Reference curve** - Curve that will be used as the depth **Reference** for a set of logging curves.****Offset Curve** - Curve that will be compared to the **Reference** curve in order to find required depth pairs.****Curves shifted** - Curves that will be shifted with depth pairs found by comparing **Reference** to **Offset** curve.****Observed** - **Observed** depth is the depth of a point before depth shifting****Actual** - **Actual** depth is the depth of the point after depth shifting.*

WLC_PETROPHYSICAL_COMPOSITE_1.LIS completed:

24-JAN-2008

WLC_PETROPHYSICAL_COMPOSITE_1_INF_1.PDF completed:

24-JAN-2008