

# Level One

## SonicVision\* Processing

Company:	<ul style="list-style-type: none"><li>Esso Australia</li></ul>
Well(s):	<ul style="list-style-type: none"><li>BMB_B16</li></ul>
Country:	<ul style="list-style-type: none"><li>Australia</li></ul>
Survey:	<ul style="list-style-type: none"><li>SonicVision*</li></ul>
Logging Date:	<ul style="list-style-type: none"><li>09-Aug-2005</li></ul>
Interval:	<ul style="list-style-type: none"><li>Run-4: 1862.17m to 2634.95mMD</li></ul>
Products:	<ul style="list-style-type: none"><li>Compressional Slowness</li></ul>
Analysis Date:	<ul style="list-style-type: none"><li>11 Aug 2005</li></ul>
Analyst(s):	<ul style="list-style-type: none"><li>Zachariah John Snr Petrophysicist (zach@perth.oilfield.slb.com)</li></ul>

Prepared by:  
Schlumberger Oilfield Australia Pty Ltd  
Data & Consulting Services  
Level 5, 256 St Georges Terrace  
Perth WA 6000  
Telephone: +61-8-9420-4800  
Facsimile: +61-8-9322-3080

\*Mark of Schlumberger

## Quick Look Summary

SonicVision logs were acquired by Esso Australia Pty Ltd in well BMB-B16, Australia logged on Aug 06 2005. This report comments on the field logs and presents the results of a Quick Look processing for compressional slowness.

The SonicVision data was acquired in the following runs so far:

Run-1: No SonicVision logged

Run-2: SonicVision processed from 790.3m to 1231.2396mMD

Run-3: SonicVision processed from 1225m to 1881.0732mMD

Run-4: Sonic Vision processed from 1862.17m to 2634.95mMD

Run-2 and 3 were covered in a previous document .

This document covers processing of Run-4

The data for each run was loaded into Geoframe\* and processed using BestDT3. BestDT3 software is able to process all Schlumberger sonic logs, both Wireline and LWD.

## Observations:

The sonic in this run had in places a strong collar arrival at around 200us/m ( 800us on STplane). This strong collar arrival was masking the DTcompressional in certain intervals.

The following processing was performed in BestDT3:

1. Band pass filter : 10Khz-16Khz. This filter although reduced the collar arrival that was apparent at around 9Khz, but did not improve the coherence of the DTcompressional.
2. F-K filter : This filter was successful in removing the collar arrivals
3. Median residual filter: This filter was also successful in removing the collar arrivals.
4. KL-Collar filter : This filter was NOT successful in removing the collar arrivals.

The processing was performed using the DDBHC mode and for Wideband using F-K filter.

Editing was required to be performed on the labelling to ensure that at some places, the labelled DTco was on the highest coherence peak.

The **shear slowness** was available at certain intervals, but were not manually marked as the objective of this level-1 processing was on compressional slowness.

The mud velocity was approximately 615.941 us/m ( 190 us/ft )

## Deliverables:

The following deliverables are provided with this Quick Look processing:

Report		bmb-b16sonicvisionrun4_processing_report.pdf
Run4	Las file	bmb-b16sonicvisionrun4-processedresults-lasfilepc.las
Run4	Graphics file	bmb-b16sonicvisionrun4-processedresults-graphicsfile.pds