

## SAGASCO RESOURCES LIMITED

WELL : FLINDERS-1

VSP PROCESSING COMMENT

RIG SOURCE SURVEY

## DATA ACQUISITION

Rig Source VSP survey was acquired in the above well on 18th December 1992. The source a 140 cubic inch "Bolt" airgun was located at a depth of 5.0M below MSL at a bearing of 340 degrees North, with a hydrophone positioned 1.5M vertically above the source.

A total of 100 levels were recorded at mainly 25.0M depth intervals, between the depth of 350.0M and 2705.0M measured depth below DF.

## DATA PREPARATION

Preliminary times were picked from the first break on the gun hydrophone signal to the first break on the well geophone signal. These manually picked times were then modified using an automated trace alignment procedure, for improved timing accuracy and alignment in the VSP processing. The data quality was good throughout the survey with all levels having well defined first arrival troughs.

The levels shot at depths of 1546.0M and 2272.0M measured depth below DF were omitted from the final VSP as the depth spacing is too small, 98 levels were used in the final VSP processing.

## SOURCE SIGNATURE DECONVOLUTION

Due to the variability in the hydrophone times, source signature deconvolution was carried out on a trace by trace basis prior to stack. This removes the effect of the bubble from the geophone data and the effect of any slight variation in the source output. The operator was designed from 360 ms of the hydrophone signature.

A post deconvolution filter was required after source signature deconvolution in order to align the data.