

IV.2 PRE-PRODUCTION PROCESSING TESTS

Line BB85-26 was chosen as a test line for two reasons: 1. it crosses Durroon No. 1 well, and 2. it is a key line for the Sea Eagle prospect.

The following tests were performed before stack.

1. Gain Test to determine an optimum amplitude recovery function.
2. Filter Test to get an idea how energy is distributed for different frequencies. The following panels were run:-

1. no filter
2. 0-10 Hz
3. 7-14 Hz
4. 10-20 Hz
5. 14-28 Hz
6. 20-40 Hz
7. 28-56 Hz
8. 40-80 Hz
9. 56-112 Hz
10. 80-125 Hz

3. FK filter followed by Designature, Predictive decon and stack was compared to the same processing without FK filter (figure 5.7). FK filter made an insignificant improvement, therefore, it was decided not to run FK filter in production processing.

4. A comprehensive test of deconvolution before stack including designature was run on shot records 90 to 290 followed by stack (figures 5.8 & 5.9).

1. No decon
2. 4-240, 2 windows
3. 12-240, 2 windows
4. 16-240, 2 windows
5. 24-240, 2 windows
6. 32-240, 2 windows
7. Desig. followed by 4 - 240, 2 windows
8. Desig. followed by 12 - 240, 2 windows