

4.0 PARAMETER TESTING

Initial tests such as gain tests, filter tests and F-K filter tests were carried out on shot records: BB90-191 SPT 1100 and 1750

4.1 GAIN RECOVERY TEST

A velocity function was used for spherical divergence correction and a time versus amplitude graph made on the resultant data. From this graph, an exponential gain function was derived and applied to the data.

- Gains tested were :-
- (1) 400 - 4400ms @3db/sec.
 - (2) 400 - 4400ms @4db/sec.
 - (3) 400 - 4400ms @5db/sec.

4.2 FILTER TEST

Several zero phase band pass filters were applied to a shot record after the application of gain recovery to ascertain the range of useful frequency present in the data.

- Filter parameters tested were :-
- (1) OUT - OUT
 - (2) OUT - 7.5/30 HZ/DB PER OCT
 - (3) 5/24 - 10/30 HZ/DB PER OCT
 - (4) 7.5/24 - 15/30 HZ/DB PER OCT
 - (5) 10/24 - 20/30 HZ/DB PER OCT
 - (6) 12.5/24 - 25/30 HZ/DB PER OCT
 - (7) 15/24 - 30/30 HZ/DB PER OCT
 - (8) 20/30 - 40/48 HZ/DB PER OCT
 - (9) 25/30 - 50/60 HZ/DB PER OCT
 - (10) 30/30 - 60/60 HZ/DB PER OCT
 - (11) 35/40 - 70/72 HZ/DB PER OCT
 - (12) 40/48 - 80/72 HZ/DB PER OCT
 - (13) 50/60 - 100/72 HZ/DB PER OCT
 - (14) 60/60 - 120/72 HZ/DB PER OCT
 - (15) 70/72 - OUT HZ/DB PER OCT
 - (16) 80/72 - OUT HZ/DB PER OCT
 - (17) 90/72 - OUT HZ/DB PER OCT

4.3 F-K FILTER TESTS

Dip ranges were selected from the shot records and their FK spectrum displays and were F-K filter tested with asymmetrical cuts in the pass mode as follows;

