that shall follow the procedure described below and be subject to the approval of the Engineer.

Test Procedure

A. Seal the pipeline. Fix all blank flanges. Remove all on line equipment that may be damaged by high pressure.

B. Only test against blank flanges, do not attempt to test against closed valves.

C. Cover the pipe with sufficient backfill to protect it from direct sunlight, leaving joints exposed where practical.

D. If backfilling is not practicable schedule the tests for early morning or evening.

E. Fill the pipeline from the lowest point. Bleed the air from all high points and flange points where it is possible and tighten once water begins to spill.

F. When the line is full, close off the filling valve and check all flanges and the small diameter test pipework for leaks.

G. Phase 1

Commence raising the pressure at the filling point to the operating pressure or a pressure of 5 bar, whichever is higher. Hold this pressure for a period of 2 hours and add water whenever the pressure drops by 0.2 bar in order to maintain a steady pressure.

Visually inspect the pipe length for leakage.

H. Phase 2

After two hours raise the pressure to 1.3 times the operating pressure or 6.5 bar, whichever is higher, as quickly as practical. Again maintain this pressure for two hours by adding water whenever the pressure drops by 0.2 bar.

Visually inspect the pipe length for leakage.

I. Phase 3

At the end of the second two hours release the pressure back down to the phase I level i.e. the operating pressure or 5 bar, within a period of no more than 30 minutes and as quickly as is practical, in a controlled manner.

Phase 3 – Case 1

If after one hour the pressure in the pipelines remains at or above the