

European Forum for Reciprocating Compressors

3<sup>rd</sup> Conference, Vienna, March 27-28, 2003

Reliability and Economics of Compression Systems - Recent Trends in the Market of Reciprocating Compressors

**Authors:** Malcolm Comyn, Jan Stale Hansen, Inge Bjorkevoll, Rudy Garza and Gerdt Wilken, Exxonmobil Corporation and Frits Boer, Thomassen Compression Systems

**Submission of Title and Abstract**

**Title : Reliability experienced with offshore reinjection compressors.**

**Abstract:** The service history of a pair of medium speed, three stage, reciprocating compressors in offshore re-injection service is described, and the reliability data is presented. The failures which detracted from the reliability, and the corrective measures taken are described. Failed components included pistons, piston rods, piston rings, packings, bearings, valves, o-rings, bolts, instruments, liquid separator vanes and a main drive motor. Regulatory requirements linking production to the flare rate, caused production to be deferred whenever the injection compressors were inoperative, thus making downtime uneconomic. Recommendations are made for the specification of new equipment for similar service.