

SAFETY BULLETIN SB010

From: Tesco Products - Technical Solutions and Health, Safety & Environment

Date: May 13 2004

Re: CDS System Modifications

INTRODUCTION

Tesco currently manufactures a selection of Casing Drive Systems (CDS), as well as a standalone Hydraulic Power Unit (HPU) to power these systems. An integral component in these systems is the hydraulic actuator; it is used to operate both the internal and external drive. This system has been designed to operate safely and reliably under expected drilling conditions.

MODELS AFFECTED

All Actuators used in internal and external Casing Drive Systems (Ref P/N 15800)

SAFETY CONCERNS

- 1. The actuator internal safety spring is designed to provide closing force in the event of total hydraulic power loss. In some applications pilot operated check valves have been installed to trap hydraulic pressure in the closed position without the supply pump running. This does not provide adequate closing pressure to the actuator in the event of fluid loss.
- 2. A wearband is used in the actuator cylinder and cap to center the piston. In some isolated instances this wearband has extruded into the piston clearance gap. This condition increases the force required to hydraulically operate the actuator and may prevent the safety spring from maintaining closing force on the actuator in the event of a total hydraulic power loss.

ACTION REQUIRED

- 1. Remove the pilot operated check valves currently installed on any CDS actuators.
- 2. Ensure that hydraulic power is provided to the actuator close function at any time the CDS close function has been selected (see CDS Operation Manual).
- 3. Prior to each job check the actuator safety spring operation by hydraulically compressing the spring and subsequently venting both open and close port to atmosphere to ensure the cylinder extends smoothly without binding (see CDS Operation Manual).

If there are any questions about or concerns with this document please contact one of the following Tesco Products Departments <u>Health, Safety & Environment</u> or <u>Technical Solutions</u> (403)-233-0757