

Tripping Operations in Hydrostatically Overbalanced Wells

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Introduction

These guidelines (recommended practices) represent a composite of the practices employed by various operating companies, service companies, and drilling contractors in overbalanced tripping operations. In some cases, a reconciled composite of the various practices employed by these companies was used.

Recommended practices set forth herein are considered acceptable for accomplishing the job as described; however, they do not present all the operational practices that can be employed to accomplish the same objectives. Individuals and organizations using this standard are cautioned that operations must comply with requirements of federal, state, or local regulations. These requirements should be reviewed to determine whether violations can occur.

The objective of these guidelines (recommended practices) within is to assist the oil and gas industry in promoting personnel safety, public safety, wellbore integrity, and preservation of the environment for land drilling operations.

It provides information and guidance on procedures related to tripping activities in overbalanced wells, which have inherent hazards and risks within the operation(s) and therefore require detailed care and attention to improve reliability and reduce risk to acceptable levels. The principles and recommendations have general relevance, regardless of classification, and are applicable to onshore tripping operations.

Competent and technical judgment must be used in combination with these recommendations. Each operator, service provider, and drilling contractor involved in tripping operations should review and apply these guidelines (recommended practices) according to their own policies and procedures.

Overbalanced tripping operations are being conducted with full regard for personnel safety, public safety, and preservation of the environment in such diverse conditions as urban sites, wilderness areas, very hot barren deserts, cold weather areas including the arctic environment, and wildlife refuges. As tools and equipment continually improve and develop, the technology has been applied in many geologic formations, including oil and gas reservoirs and on sour wells, thus driving the need for globally accepted standards and safe operating best practices.

The purpose of this document is to provide information and to recommend practices and procedures for planning, equipment considerations, and execution of tripping operations in overbalanced wells. It is also intended to assist operators, service providers, and drilling contractors in developing their own internal rig-specific procedures for safe tripping operations.

Tripping Operations in Hydrostatically Overbalanced Wells

1 Scope

This document provides guidelines for onshore tripping operations when the well is hydrostatically overbalanced using a fluid column without supplemental surface pressure to control inflow.

This document applies to land drilling operations.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document applies (including any addenda/errata).

API Standard 53, *Well Control Equipment Systems for Drilling Wells*

3 Terms, Definitions, Acronyms, and Abbreviations

3.1 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1

accumulator

Pressure vessel charged with inert gas and used to store and deliver hydraulic fluid under pressure.

3.1.2

alarm

An audible and/or visual indication to the user that an equipment malfunction, process deviation, or other abnormal condition requires a prompt response from the user.

3.1.3

alarm flooding

An alarming condition determined by the user, during which the alarm rate is greater than the user's ability to effectively manage.

3.1.4

alarm shelving

The ability for the user to temporarily prevent the audible and/or visual reporting of an active alarm for a period of time.

3.1.5

alarm suppression

The ability for the user to inhibit audible and/or visual reporting of an alarm.

3.1.6

annulus

Annular space between the outer diameter of the drill string and the inside diameter of the hole being drilled, or casing string set in the well.

3.1.7

blowout

An uncontrolled flow of well fluids, formation fluids, or both, from the wellbore.