Tripping Operations with Surface Back-pressure Managed Pressure Drilling with Subsea Blowout Preventer

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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 offshore drilling operations with subsea BOP.

It provides information and guidance on procedures related to tripping activities with surface back-pressure managed pressure drilling with subsea Blow Out Preventors (BOPs). These operations have inherent hazards and risks 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 with Surface Back-pressure Managed Pressure Drilling with Subsea Blowout Preventer

1 Scope

This document provides guidelines for tripping operations with surface back-pressure, managed pressure drilling in accordance with API 92S. This document applies only to drilling rigs with subsea blowout preventers.

This document does not address operations with service gas (e.g. nitrogen) injection.

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*

API Recommended Practice 59, *Recommended Practice for Well Control Operations*

API Recommended Practice 92S, *Managed Pressure Drilling Operations with Subsea Back-pressure*

API Recommended Practice 97L, *Onshore Well Construction Interface Document*

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, visual indication, or a combination thereof, 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, visual reporting or a combination thereof of an active alarm for a period of time.

3.1.5
alarm suppression
The ability for the user to inhibit audible, visual or a combination thereof, reporting of an alarm.