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Petroleum and natural gas industries — Completion fluids and materials —

Part 5: Procedures for measuring the long-term conductivity of proppants

Industries du pétrole et du gaz naturel — Fluides de complétion et matériaux —

Partie 5: Modes opératoires pour mesurer la conductivité à long terme des agents de soutènement

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Contents

Page

Foreword

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ISO 13503-5 was prepared by Technical Committee ISO/TC 67, *Materials. equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 3, *Drilling and completion fluids, and well cements*.

ISO 13503 consists of the following parts, under the general title *Petroleum and natural gas industries — Completion fluids and materials*:

— *Part 1: Measurement of viscous properties of completion fluids*

— *Part 2: Measurement of properties of proppants used in hydraulic fracturing and gravel-packing operations*

— *Part 3: Testing of heavy brines*

— *Part 4: Procedure for measuring stimulation and gravelpack fluid leakoff under static conditions*

— *Part 5: Procedures for measuring the long-term conductivity of proppants*

Introduction

This part of ISO 13503 is largely based on API RP 61[1]. Informative references are also included in the Biblography, References [2] to [15].

The tests and test apparatus herein have been developed to establish standard procedures and conditions for use in evaluating the long-term conductivity of various hydraulic fracture proppant materials under laboratory conditions. This procedure enables users to compare the conductivity characteristics under the specifically described test conditions. The test results can aid users in comparing proppant materials for use in hydraulic fracturing operations.

The procedures presented in this publication are not intended to inhibit the development of new technology, materials improvements, or improved operational procedures. Qualified engineering analysis and sound judgment is required for their application to fit a specific situation.

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