



Designation: D8053 – 18

Standard Guide for Data Management and Reporting Associated with Oil and Gas Development Involving Hydraulic Fracturing¹

This standard is issued under the fixed designation D8053; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide presents a series of options regarding data collection, data management, and information delivery and reporting associated with oil and gas development involving hydraulic fracturing. Options presented for data management and reporting are intended to improve the transparent information exchange between three primary stakeholder groups: operators, regulators, and the public. Improved information exchange is expected to enhance public understanding of oil and gas development.

1.2 Suggestions contained in this guide may not be applicable in all circumstances. This guide is not intended to represent or replace the standard of care by which the adequacy of a given professional service should be judged, nor should this guide be applied without consideration of a project's many unique aspects. The word "Standard" in the title of this document means that the document has been approved through the ASTM process.

1.3 *Units*—The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This test method is under the jurisdiction of ASTM Committee D18 on Soil and Rock and is the direct responsibility of Subcommittee D18.26 on Hydraulic Fracturing.

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2. Referenced Documents

2.1 *ASTM Standards*:²

D653 Terminology Relating to Soil, Rock, and Contained Fluids

2.2 *API Standards*:³

API RP100-2 Environmental Aspects Associated with Exploration and Production Operations Including Hydraulic Fracturing

API RP100-3 Community Engagement Guidelines

2.3 *ASQ Standards*:⁴

ASQ/ANSI E4:2014 Quality Management Systems for Environmental Information and Technology Programs

2.4 *ISO Standards*:⁵

ISO 14001 Environmental Management Systems

3. Terminology

3.1 *Definitions*—For definitions of terms used in this guide, refer to Terminology D653.

3.2 *Definitions of Terms Specific to This Standard*:

3.2.1 *flowback, v*—the act of recovering produced fluids from the formation after hydraulic fracturing operations. (API)

3.2.2 *hydraulic fracturing fluid, n*—a fluid blend that can include a base fluid, proppant, and other additives, that is expressly designed to hydraulically induce fractures in the target formation. (API)

3.3 *Acronyms*:

3.3.1 *API*—American Petroleum Institute

3.3.2 *ANSI*—American National Standards Institute

3.3.3 *ASQ*—American Society for Quality

3.3.4 *ISO*—International Organization for Standardization

3.3.5 *IT*—Information technology

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American Petroleum Institute (API), 1220 L. St., NW, Washington, DC 20005-4070, <http://www.api.org>.

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

⁵ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.