



Standard Practice for Minimum Set of Data Elements to Identify a Groundwater Site¹

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^{ε1} NOTE—The units statement in 1.3 and the designation were revised editorially in August 2010.

1. Scope

1.1 This practice covers what information should be obtained for any individual groundwater site, also known as monitoring location or sampling station. As used in this practice, a site is meant to be a single point, not a geographic area or property. A groundwater site is defined as any source, location, or sampling station capable of producing water or hydrologic data from a natural stratum from below the surface of the earth. A source or facility can include a well, spring or seep, and drain or tunnel (nearly horizontal in orientation). Other sources, such as excavations, driven devices, bore holes, ponds, lakes, and sinkholes, that can be shown to be hydraulically connected to the groundwater, are appropriate for the use intended (see 6.4.2.3).

NOTE 1—There are many additional data elements that may be necessary to identify a site, but are not included in the minimum set of data elements. An agency or company may require additional data elements as a part of their minimum set.

1.2 This practice includes those data elements that will distinguish a site as to its geographical location on the surface of the earth, political regimes, source identifiers, and individual site characteristics. These elements apply to all groundwater sites. Each category of site, such as a well or spring, may individually require additional data elements to be complete. Many of the suggested components and representative codes for coded data elements are those established by the Water Resources Division of the U.S. Geological Survey and used in the National Water Information Systems computerized data base (1).²

NOTE 2—The data elements presented in this practice do not uniquely imply a computer data base, but rather the minimum set of groundwater data elements that should be collected for entry into any type of permanent file.

¹ This practice is under the jurisdiction of ASTM Committee D18 on Soil and Rock and is the direct responsibility of Subcommittee D18.21 on Groundwater and Vadose Zone Investigations.

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² The boldface numbers given in parentheses refer to a list of references at the end of the text.

1.3 The values stated in either SI units or inch-pound units [presented in brackets] are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.3.1 The gravitational system of inch-pound units is used when dealing with inch-pound units. In this system, the pound (lbf) represents a unit of force (weight), while the unit for mass is slugs. The rationalized slug unit is not given, unless dynamic ($F = ma$) calculations are involved.

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 and health practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This practice offers a set of instructions for performing one or more specific operations. This document cannot replace education or experience and should be used in conjunction with professional judgment. Not all aspects of this practice may be applicable in all circumstances. This ASTM standard is not intended to represent or replace the standard of care by which the adequacy of a given professional service must be judged, nor should this document be applied without consideration of a project's many unique aspects. The word "Standard" in the title of this document means only that the document has been approved through the ASTM consensus process.*

2. Referenced Documents

2.1 ASTM Standards:³

D653 Terminology Relating to Soil, Rock, and Contained Fluids

3. Terminology

3.1 Definitions:

³ 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.