Electronic Transfer of Geotechnical and Geoenvironmental Data AGS4 (Edition 4.0)

# **Guidance Document**

# Transferring product information for environmental wells



GS Association of Geotechnical & Geoenvironmental Specialists

#### ACKNOWLEDGEMENTS

This document has been prepared by the Association of Geotechnical and Geoenvironmental Specialists (AGS) with the encouragement and support of the working party members. The AGS acknowledges the generous time and resources given to the project by the individual members and their employers. Without their enthusiastic support this ongoing project would not be possible.

Comment and feedback from the wider geotechnical industry has also been fundamental to the ongoing evolution of the AGS Format, ensuring that the needs of the geotechnical and geoenvironmental industry and its clients continue to be met.

#### **DOCUMENT HISTORY**

Revision	Description	Date
0	First Issue	1 Mar 2011



Revision: 0

Issue Date: 01/03/2011

# 1 Scope

This guidance document defines how water levels within wells should be transferred when measured by a dipping device. This Note for Guidance extends this guidance to specifically include the measurements for LNAPL and DNAPL above and below the water surface.

This notes for guidance does not cover the recording and transfer of purging data for wells.

# 2 Definitions

LNAP: (Light Nonaqueous Phase Liquid) - "An LNAPL is one of a group of organic substances that are relatively insoluble in water and are less dense than water. LNAPLs, such as oil, tend to spread across the surface of the water table and form a layer on top of the water table." - U.S. Environmental Protection Agency, 2010

DNAPL: (Dense Nonaqueous Phase Liquid) - "A DNAPL is one of a group of organic substances that are relatively insoluble in water and more dense than water. DNAPLs tend to sink vertically through sand and gravel aquifers to the underlying layer." - U.S. Environmental Protection Agency, 2010

MOND\_TYPE code DBSE = Depth to base of installation on monitoring round

MOND\_TYPE code DDEP = Depth to DNAPL

MOND\_TYPE code LDEP = Depth to LNAPL

MOND\_TYPE code WDEP = Depth to water from LOCA\_ID datum

#### 3 Background

When recording water levels in environmental installations it is important to also record the thickness of any product that is floating on the surface of the water or has sunk to the base of the well. Using the AGS format you can transfer this data, as detailed in this guidance, to enable the water levels and thickness of any product measures during monitoring to be determined.



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#### 4 Guidance

# 4.1 Recording of LNAPL and DNAPL

The recording of LNAPL and DNAPL should be done in the same way as the recording of the water level (WDEP) using the MOND\_TYPE (LDEP and DDEP) as shown in the following example.

Depth to base of installation readings must be included if DNAPL is detected.

Schematic representation of well featuring LNAPL and DNAPL:-



#### Example AGS data to document the above scenario:-

```
"GROUP","ABBR"
"HEADING","ABBR_HDNG","ABBR_CODE","ABBR_DESC","ABBR_LIST","FILE_FSET"
"UNIT","","","","""
"TYPE","X","X","X","X","X"
"DATA","MOND_TYPE","WDEP","Depth to water from LOCA_ID datum","AGS4",""
"DATA","MOND_TYPE","LDEP","Depth to LNAPL","AGS4",""
"DATA","MOND_TYPE","DDEP","Depth to DNAPL","AGS4",""
"DATA","MOND_TYPE","DBSE","Depth to base of installation on monitoring round","AGS4",""
```

The above 4 digit codes labelled in the graphic correspond to MOND\_TYPE codes representing individual measurements as detailed in the Definitions section of this Guidance document.



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