



Water Detection Response Team (WDRT)

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Description and Background

In January 1985, the Office of the Chief of Engineers established a multi-agency team to assist well-drilling detachments from all the military services in locating sources of ground water. This action was made in response to a growing concern by many, and expressed best by a former director of Combat Developments, U.S. Army Engineer School: "The number one problem facing the Army well-drilling program remains our inability to detect subsurface water prior to drilling." The WDRT was designed around four components called elements: the database, remote sensing, supporting specialist and geophysical elements. The team is staffed on an as-needed basis from a pool of civilian scientists and engineers representing various government agencies. The WDRT provides military well drillers with site specific information to assist mission planners make informed decisions to meet mission requirements. The Army Geospatial Center's (AGC) Hydrologic Analysis Team has the lead for this mission. Support is global in extent but focused on arid and semi-arid regions of CENTCOM and AFRICOM.



Key Capabilities

The WDRT is the Department of Defense's (DoD) prime organization for assisting military well drillers, whether for military or humanitarian, or nation-building activities. Its primary function is to assist and advise well-drilling teams on the location of the best well-drilling sites and depths, and to provide information on drilling conditions for logistical planners. A staff of ground water experts is available on-call to provide information and assistance, and to produce studies for military well-drilling-related activities. The team possesses an inventory of state-of-the-art remote sensing and geophysical equipment, and has numerous bibliographic sources readily available for most areas of the world. The WDRT also offers a "Hydrogeology for Military Well Drillers" short course upon request.

Product Development

Producer - U.S. Army Corps of Engineers, Army Geospatial Center, Warfighter Geospatial Support & Production Directorate. Most WDRT Requests for Information (RFI's) are handled via a tailored report forwarded to the customer. In return AGC requests that a copy of the driller's log be sent back to AGC for inclusion into the Water Resource Data Base (WRDB) to assist future well drilling missions. This data is available in shapefile and KML/KMZ formats. The newest versions of WRDB datasets are built with Arc Geodatabases utilizing NGA Feature Attribute Coding Catalogue structure for portability.

Current Status

More than 2,000 military well drilling sites have been evaluated over the history of the WDRT in countries around the world. Large volumes of invaluable information have been collected in areas of high interest to DoD to rapidly support future missions. Over 950 completed well logs have been entered into the WRDB to provide on-line, 24-7 support to future drilling mission planners.

U.S. ARMY CORPS OF ENGINEERS – ARMY GEOSPATIAL CENTER
7701 TELEGRAPH RD.
ALEXANDRIA, VA 22315

www.agc.army.mil • www.agc.army.smil.mil • www.agc.ic.gov

Updated Jan 12

Point of Contact

Thomas R. Spillman COMM: (703) 428-7869, DSN: 364-7869,

Internet e-mail address: Thomas.R.Spillman@usace.army.mil

Intelink S e-mail address: tspillma@agc.army.smil.mil

JWICS e-mail address: tspillma@agc.ic.gov

Internet e-mail address: DLL-AGC-HYDRO@usace.army.mil

Intelink S e-mail address: hydro@agc.army.smil.mil

JWICS e-mail address: hydro@agc.ic.gov

U.S. ARMY CORPS OF ENGINEERS – ARMY GEOSPATIAL CENTER
7701 TELEGRAPH RD.
ALEXANDRIA, VA 22315

www.agc.army.mil • www.agc.army.smil.mil • www.agc.ic.gov

Updated Jan 12