

Down-Hole Cameras and Video Inspection Services

Capabilities of the Site Investigation Field Unit (SIFU)

Overview

Ohio EPA's Site Investigation Field Unit (SIFU) provides down-hole video inspection services of wells and open boreholes using a Well-Vu™ Down-hole Camera to support environmental site investigations. The cylindrical, waterproof camera is connected to a spool of coaxial cable and produces real-time recordable video as it is lowered into a well or borehole.

The camera may be used to investigate wells or boreholes greater than two inches in diameter and up to 300 feet deep. The videos can be used to determine well casing integrity, to identify obstructions or casing damage, to locate and observe ground water producing intervals and to observe gross contamination that may be present (for example, non-aqueous phase liquids or surface water infiltration).

Down-hole videos are especially helpful to determine the construction of wells for which construction logs or records are not available and to select the appropriate screen intervals when installing new wells (if the borehole integrity is competent). The camera is also useful for locating ground water producing fracture zones and for evaluating wells which are no longer producing water (for example, plugged well screen).



Well camera and tripod assembly.



View of an open borehole using the down-hole well camera.



Preparing to use the down-hole camera to evaluate a well.

Videos from Down-Hole well camera inspections

Monitoring Well with Root Intrusion in Screened Interval

Video showing tree roots growing into a two-inch diameter PVC monitoring well screen. The root mass impeded ground water sampling activities.

Monitoring Well Screen After Redevelopment

Video showing a two-inch diameter monitoring well screen after well redevelopment. The well screen contained approximately two to three feet of silt prior to redevelopment activities.

Open Borehole Wall Collapse

Video showing borehole wall collapse at approximately 128 feet in a 6-inch diameter, 325 foot deep sandstone well in Knox County, Ohio.

Active Fracture in a Sandstone Bedrock Open Borehole

Video of a 6-inch diameter sandstone well in Knox County, Ohio showing ground water flow into the well through a bedrock fracture.