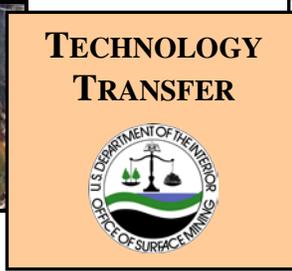




AR well investigation



MCR shaft investigation



Portable borehole camera system



WR shaft investigation

OSM Technology - Downhole Camera Systems

OSM is using downhole (borehole) camera technology to investigate and document conditions in wells, shafts, mine voids, and other subsurface features associated with mining and reclamation activities and AML projects in the Appalachian, Mid-Continent and Western Regions of the United States. The portable camera systems utilize both color and black and white cameras that are fully submersible and capable of descending to depths up to 1,000 feet. These systems provide continuous, permanent records of existing conditions, as well as real-time viewing.

Uses and Applications

- Assessing the integrity of water wells (domestic & monitoring), boreholes and mine shafts
- Geochemical, geophysical and hydrogeologic investigations
- Inspection of underground mine workings, shafts, and voids
- Gathering information on underground mines beneath high-use areas like roads, homes, and buildings
- Aid in the design and implementation of grouting projects for stabilization of underground mine workings, as well as other reclamation projects
- Debris assessment from dumping at AML shafts/locations
- Investigating water levels and mine pool elevations
- Protection of data quality and data investments
- Examination of well casings, well screens and perforations, and fracture integrity
- And More!!!

Systems Available:

Appalachian Region:

- * Portable Systems
- * Truck Mounted System

Mid-Continent and Western Regions:

- * Portable Systems

Portable System Specifications & Capabilities:

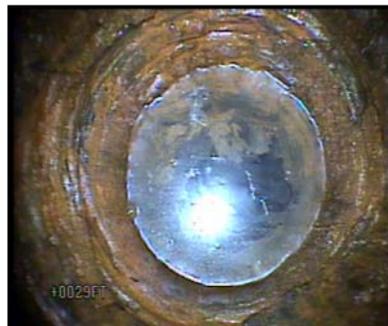
- Maximum depth of 1,000 feet
- Video recording system with depth indication
- Powered by 110 AC current or 9V/12V power converter
- 2" minimum internal well diameter
- Auxiliary lighting
- Motorized pan/tilt option for 360° viewing
- Images captured to Hi8 video tape or DVD

OSM Regional Contacts

- * **Appalachian Region** - Jay Hawkins
jhawkins@osmre.gov (412) 937-2127
- * **Mid-Continent Region** - Debbie Dale
ddale@osmre.gov (618) 463-6463 ext. 5149
- * **Western Region** - TBA



Water-bearing fracture in an uncased well (AR)



Bacterial contamination in domestic well



Void under highway due to collapsed mine works (MCR)