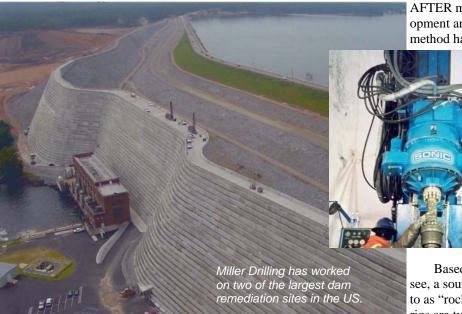
Sonic drill at work in dam remediation



AFTER more than 27 years of development and testing, the sonic drilling method has found a market in geother-

mal installation, environmental investigation and mineral exploration, but, every year, companies find new applications for it.

"For us, the geoconstruction market has really opened up over the past few years as people learn what a sonic can do," according to Shane Hughes, sales director for Miller Drilling Co. Inc.

Based in Lawrenceburg, Tennessee, a southern state that Hughes refers to as "rock country," Miller's sonic rigs are typically deployed where the ground conditions warrant their use:

conditions where there is substantial over-burden or water in the forma-

Miller Drilling has been using sonic drill heads, manufactured by Sonic Drill Corporation, since the late 1990s. "What impresses most people is the ability of the sonic rig to drill dry," says Mr. Hughes. "Because it is so much less intrusive, particularly when you are talking about dam remediation. Everyone is concerned about hydro-fracturing or getting high-pressure air into the formation."

Miller has worked on two of the largest dam remediation sites in the US using sonic rigs. "We do a lot of de-watering of sites...because of liquefaction at the toe of a dam," Mr. Hughes adds. "In some cases, we sink 1,200-1,300 wells to de-water a dam."

A sonic rig can provide accurate core samples to depths of 300 ft. and beyond. It can also core completely dry, using no air, water or drilling mud.

With four sonic drill rigs constantly on the go, Mr. Hughes says "it all comes down to geology." He explains: "Basically, a sonic rig is capable of getting through things that would take several other conventional methods to get through. We call it in when we know what we're facing in the formation."

Recently, Miller was asked to demonstrate the sonic drilling method against the ODEX method, so the US Army Corps of Engineers could

decide on their preferred choice for a dam-remediation project. The sonic drill won and Miller was, once again, sending its sonic rigs to a high-profile project.