

Testing Begins on Water-Recycling System for Sonic Rigs

Throughout the world, company CEOs and industry leaders are trying to be as environmentally responsible as possible – even in the messy world of drilling.

Engineer Ray Roussy, inventor of the modern-day sonic drill and president of both Sonic Drill Corporation and Sonic Drilling, gave his product a head start more than 30 years ago as it does not require drilling mud for lubrication and cooling. Instead, it uses only air or water, and that difference alone can result in 70% less mess on-site.

Experimenting with new equipment and ideas is an ongoing process for the Sonic team, and that experimentation led to the search for a method to recycle drilling water. While the sonic-drilling system uses only fresh water to drill, as it bores through the earth it picks up sand and other materials, which are routed back to the surface.

Searching for a recycling solution, Sonic Drilling's general manager, Bill Fitzgerald, decided to test a Sand Guzzler, supplied by Tony Tibban of Tibban Mfg of California.

"Normally, we would dig a pit to recirculate the water," explained Mr. Fitzgerald. "But some sites may be nicely grassed, where you don't want to make a mess by digging a pit. So, we put in one of Tibban's Sand Guzzlers and attached it to what we are calling our roll-off bin."

"This is a bin where the sand settles to the bottom and the water runs over the top of the baffles, which filters out most stuff, leaving mostly water in the tank. When we're done, we can load up everything and take it away and there's no mess left behind."

Mr. Fitzgerald says that Tibban gave him the Sand Guzzler to use free of charge to see if it worked with the sonic equipment. "We've had it on a few different jobs now and it has been very favourable," he said.

However, in keeping with Sonic tradition, Mr. Fitzgerald was not completely satisfied with either his own roll-off bin or the Sand Guzzler, so more research and development is under way.

Tibban has been working on mud-recycling systems for some time and released its first MudPuppy in 1990. Since then, the company has refined the equipment and process, improving its environmental performance along the way.

Tibban has now developed five MudPuppy models, along with the Sand Guzzler and a variety of other auxiliary drilling equipment.

