

## At Coffey's Windmill, the water is still safe

- The water quality testing budget is sinking despite the inevitability of some leakage from the NTS.
- By Keith Rogers (*abridged for length, JB*)

The water would come from a 500 foot deep well that supports life on the parched NYE County landscape that stretches to the Nevada Test Site.

Don James, a federal environmental specialist, arrived in his four-wheel-drive pickup to sample ground water for contamination. It had taken more than an hour for James to drive there from Beatty, chat with ranch owner G.L. Coffey, and continue to the edge of the 920-acre spread. The windmill was yet another 12 miles away.

"Coffey's windmill is probably the closest one [well] west of the test site that we do" James said. Since the early 1960's James has sampled government wells at the test site and private and military wells around it, looking for evidence of nuclear-bomb residuals that could travel through ground water layers beyond the test site boundary. "No Tritium. No gross Beta. No gross Gamma. Nothing", James said.

As time goes on, government scientists acknowledge, though, that chances increase for radioactive materials escaping from test cavities beneath Frenchman Flat, Yucca Flat and the northern area around Pahute Mesa. Yet James and his boss, Max Davis, have watched their environmental monitoring budget decrease steadily since 1993, dropping from \$4 million to \$2.3 million this year. That translates to less frequent sampling and, in some cases, no sampling. The program is designed to check around all nuclear test locations, including in Alaska, Colorado, Mississippi and New Mexico.

One of the stops on James' route was the Air Force's installation at Groom Lake, where wells were drilled along the dry lake bed adjacent to the test site's northeast corner in 1959, 1964, 1987 and 1991, according to an EPA document. "We used to sample wells out there until they cut it off last year", James said, noting that samples were analyzed only for radioactivity, not toxic substances such as dioxins, which former Groom Lake air base workers claim they were exposed to in two federal lawsuits.

In internal reports dated from 1967 through 1987, government scientists analyzed the various radionuclide migration problems but didn't inform the state until 1990 that radioactive materials had unexpectedly escaped the Sandreef test cavity 13 years earlier, and had traveled one-fifth of a mile where they were found in a shaft being constructed in 1985.

In April, DOE officials confirmed that a project envisioned in 1991 for drilling or revamping 100 monitoring wells over a decade would be cut in half because the \$100 million cost of the project turned out to be unrealistically low. Despite the DOE's whittled-down program to drill up to 49 monitoring wells for \$160 million, the department relies on a contractor for sample collection and analysis, not the EPA. The EPA samples 16 wells monthly at the test site and 21 others twice a year that are not part of the DOE's new monitoring program. All the EPA's sampling locations on the test site are selected by the DOE. The DOE's contractor REECO, does, however, check hydrology monitoring wells for tritium, fission products, toxic chemicals and metals. Nevada officials review the program and collect some samples on their own to verify the DOE's accuracy. The contractor also exchanges samples with the EPA for quality control.