

KELLY AFB AREA ABANDONED SHALLOW WELL PLUGGING PROJECT

PROJECT SUMMARY

Beginning in 2001 the United States Air Force, San Antonio Water System, and the San Antonio Metropolitan Health District coordinated a project to identify and plug abandoned shallow groundwater wells located over the contaminated groundwater plume near the former Kelly Air Force Base. Abandoned shallow groundwater wells pose a serious safety hazard and in the Kelly community can contain concentrations of volatile organic compounds from contamination. Some of these wells had been used for irrigation and as a source of drinking water in years past. After a public water supply was made available to the residents, many of these wells had fallen into disrepair and were abandoned. Abandoned wells are also often used to dispose of refuse and garbage, further polluting the groundwater below. Plugging these abandoned wells removed all of these potential health and safety hazards.

WELL PLUGGING METHOD

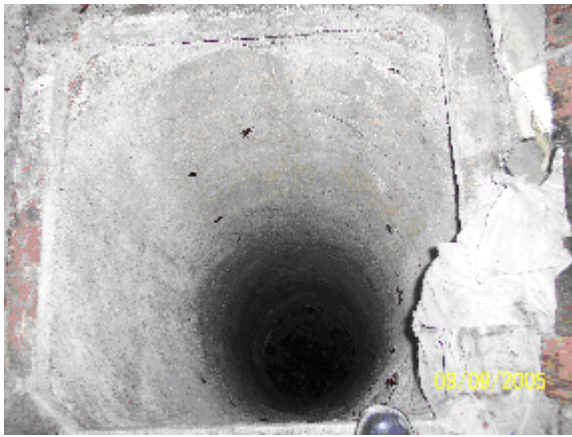
The wells were filled with sand from the bottom up to a depth of a few feet and then covered with a concrete cap. The sand particles filled all the gaps to ensure that air pockets and spaces would not be present, while the concrete cap permanently closed the well.



RESULTS

Seventy-five (75) wells were identified and plugged at no cost to the residents during 2001 and 2002. This project removed many health and safety concerns within the community.





Three (3) additional abandoned shallow groundwater wells located in the Kelly area were plugged in early fiscal year 2009. The additional three wells plugged were reported by residential owners. These well owners were concerned that the abandoned wells were located over the contaminated shallow groundwater aquifer.

CONCLUSION

The success of this project was due to a collaborative partnership between the United States Air Force, San Antonio Water System, and the San Antonio Metropolitan Health District. This was an excellent opportunity for three agencies to work together to eliminate potential pollution and safety hazards in the Kelly community. Seventy-eight (78) abandoned shallow wells located over the contaminated shallow aquifer near the former Kelly Air Force Base were identified and plugged to State standards at no costs to the residents by this shallow well plugging project.