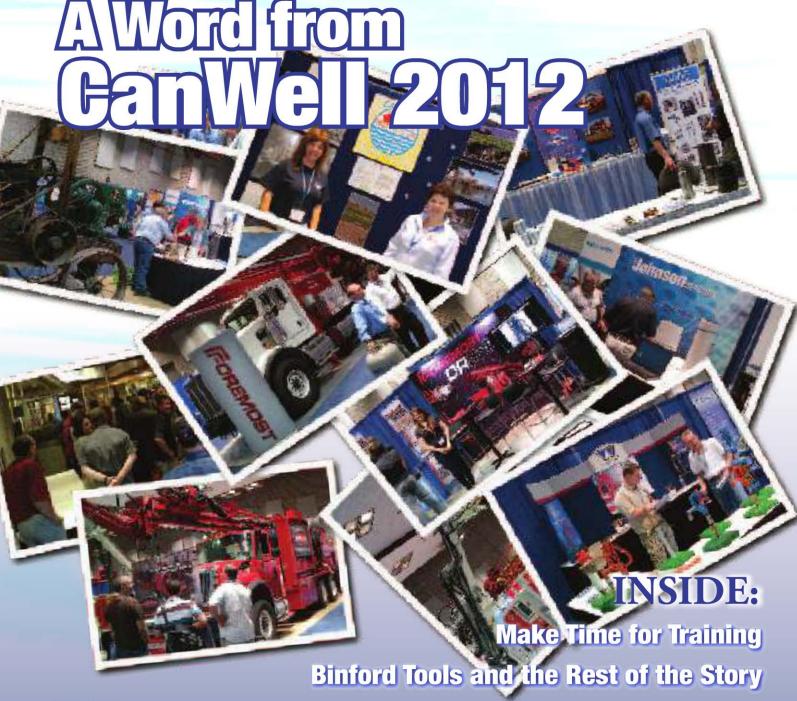
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Binford Tools and the Rest of the Story

like talking to well drillers. They have daily experience delving into the mystery of the subsurface. When you talk to them, the world comes alive in three dimensions. Then there are the technical aspects. You know the game everyone periodically plays... "If I could live my life over again, I would...". Well, on my "live-over bucket list" would be things like welding and mechanics things well drillers seem to do naturally. At least that is my experience working overseas with volunteers like Les Wing (Amethyst Well Drilling, Thunder Bay, ON) and Les Babcock (Lifewater Drilling, Bow Island, AB). I love talking with "The Les" about RPM, PSI, MPG, CFM... and then watch them go make it happen. And they make it happen in places like Haiti and Liberia where there are no Canadian Tires, Fluidline Incs or CAT shops, and improvisation is a daily necessity.

But drilling wells as volunteers with Lifewater.ca is about much more than pull-down pressure, bit type, casing options and filter pack design. I have had the privilege of helping train and equip drillers in five countries in Haiti and sub-Saharan Africa. Lifewater.ca's





overhead is under five per cent because it is run by volunteers working from home and is powered by volunteers like the Les's who pay their own way overseas to train and equip local workers. At times the main challenge is managing the stress of knowing we need to raise \$1,500/day to make the wells being drilled in remote villages affordable for people earning just a few dollars per day. At other times it is the logistical challenges - ordering supplies six months in advance so they can be shipped by sea container, ordering drill bits from Vancouver, power units from Houston or surplus military trucks from the UK. But technical pressures are short-term and, in many ways, fun to solve (I always used to enjoy watching "Tim the Tool Man Taylor" pitch bigger and better Binford tools on the show Home Improvement). And financial problems always seem to resolve themselves by wonderful coincidences like putting me in contact with selfless people who give generously and sacrificially to help people they will never meet half a world away.

I have been helping drill wells in Africa since 1993, and have had the opportunity of going back and visiting some of the

drill teams dozens of times. I have also been able to go and visit wells that Lifewater.ca drilled years ago and see firsthand how they are impacting the community. Sometimes the stories are inspiring and motivating - wells being maintained in working condition despite every imaginable adversity. Sometimes the stories are extremely discouraging - pumps being allowed to sit broken while children die from drinking contaminated swamp water. If only the problem was financial, it would have been solved last week. If only the main problem was logistical, the Les' of the world would solve them next week. But the hardest problems to solve are those associated with social issues and cultural perspectives. These take time to understand, and even longer to work together with the communities to address.

You Don't Roast a Dog Quickly

I would like to share with you a few stories that illustrate some of these non-technical challenges. The inspiration for this came a few years ago after a very discouraging day ended a long, discouraging week. I was depressed and was grateful for the listening ear of Rev. Anthony, a local pastor that we had struck

up a friendship with some years ago. In fine African style he listened silently for over an hour as I poured out my pent-up frustrations, discouragement and growing desire to just quit and walk away.

I told him how frustrated I was that rains had made the roads totally impassable - three - foot potholes filled with clay mud bogged vehicles down for days and weeks. I shared how the roads didn't matter anyway because most of our trucks were broken down since the concept of "preventative maintenance" was foreign to our drivers. "Why spend money fixing a truck that is still driving?" I was open about the local Board, management and that the workers seemed disengaged and unmotivated. I told him that drilling supplies were running out because donations from well drilling companies, families, churches and schools back in Canada had slowed to a trickle due to economic uncertainty. I summed it up but saying that even if the roads had been good, trucks working and drillers ready to go, we could not use the last of the supplies because village after village was not prepared to contribute labour or supplies to help drill the well they needed



to have access to safe drinking water. And, everywhere we went, there was Cholera and children were dying from preventable water-borne diseases.

When I was finally done speaking, we sat in silence while Rev. Anthony thought about all that I had shared. I waited, wondering what profound insight and guidance this old pastor

would give during my time of need. He finally reached out, held me by both my shoulders, looked me in the eye and said, "Well, brother Jim, you don't roast a dog quickly." That was it. He let go of my shoulders and sat back. I apologized for not understanding and asked him to explain. He patiently explained that everyone knows that dog meat is oily, and that if you are in a rush and try to cook it over a hot coal pot, the outside of the dog will burn and the inside will be raw and oily. It needed to be cooked for a long time over a low heat to cook evenly and for all the extra oil to drip out. Then it would be tender and delicious. I flashed back a number of years to when other volunteers and I had unknowingly eaten this meat for many days before we finished the trip as vegetarians after we learned where it was coming from. Then I settled down and really thought about what he was telling me. Be patient, hold the course, don't give up. It takes time to bring about lasting change. It takes time for people to gain the hope and trust needed to build a vision of the future when they have spent the past 15 years repeatedly losing everything to one nameless rebel faction after another. It takes time to build local capacity and to teach guys to drill wells when they have never held a power tool in their lives. It all takes time.

I thanked Rev. Anthony, had a drink of Gatorade, took a sleeping pill and went to bed. In the morning the sun came out, the roads started to dry out, the drillers



16

pounded on my door saying they were ready to go and the village down at Grabo town was ready to work. I put on my pants, one leg at a time, didn't quit and took another step forward. Thanks to Rev. Anthony, since this time, we have drilled 500 more wells, saving thousands of lives.

The Sip of Water

No one questions that lives are saved by drilling wells. But sometimes even more lives are saved by knowledge. By 2004, we had managed to drill 100 wells despite the ongoing civil war. But while we had dealt with the chaos and uncertainty of rebel groups, we had not been able to talk to women. In most African countries, women do not talk to strange men. It is simply not done. Yet water is woman's work, from the choice of source, to how it is carried, to what it is used for. Drilling water wells is something that you, the readers, understand. Yet it is only the first step on the journey to improved health. If it is not stored safely or if it is used too sparingly, kids can still get sick and die. Safe water must be combined with improved sanitation for there to be lasting health benefits.

The final piece of the puzzle is hygiene things like washing hands. I first thought that it was unbelievable that volunteers have to go to Africa to teach the people how to wash their hands. Until the day that I was in the Ontario government building and was ready to leave the washroom when I saw a big sign on the door showing hands covered in germs with the caption "Did you wash your hands?" And I, the knowledgeable "Water Expert" who had helped Walkerton get safe water and had managed the drilling of over a hundred wells in Liberia, had not done so. It was a very humbling moment standing in a washroom with running water and soap dispensers just feet away.

This led to us developing some participatory hygiene lessons. In 2004, when the 15-year civil war ended, female volunteers started to come to Liberia and hold workshops with the local women. This was a big deal, because they could bridge the cultural gender gap and talk with the women. We started learning how large this missing piece of the puzzle really was.

A three-day hygiene workshop was being held in Sand Town, Montserrado County, Liberia. Volunteers Lynda and Kumba had spent two days talking about what disease is, how it is transmitted, and how to break these transmission pathways. Things like, flies eat poo poo and leave some when they land on your food — so cover over after toileting and keep a cloth over your food until it is ready to be eaten. During the workshop, Elizabeth, the Senior Village Woman's Leader, became quite upset and started crying, and crying and crying. After the second day, there was enough trust that the volunteers were able to ask her daughter Fatu what had made Elizabeth so upset.

Fatu shared this story with them. In their Bassa tribe, they waited six months to see if a baby lived before it was named. It was the cultural honour for the grandmother to welcome a new baby into the tribe at the naming ceremony by giving the first drink of water. In their village, their only source of water was a stagnant swamp. Following the naming ceremony, three of Fatu's children had died from violent running stomach. During the hygiene workshop, Elizabeth had suddenly realized that the still surface water was full of death, and that by giving this water, she had killed three of her grandchildren. What a burden to live with!

During the workshop, there was a tearful confession and forgiveness between Elizabeth and Fatu. But the story does not end there. When the gals went back to visit Sand Town the following year, they found that Elizabeth was maintaining the pump in perfect working order and that only this water could be used for naming ceremonies. She told how two babies in the

neighbouring village had become deathly sick, but that she had been able to save one by making and administrating the Oral Rehydration Solution she had learned about in the workshop. She shared how she could never bring back her grandchildren, but she could help other families keep their children alive and this gave her determination and focus in her life.

The Year Ahead

In the coming year we will continue to train local workers. If you know how to run an air hammer rig and you want to volunteer this fall or coming winter, please contact me. We will continue to equip the workers. If you have a small air rotary rig that you want to donate or sell to help the overseas team, please let me know as soon as possible. We will continue to raise funds to make wells affordable since the \$3,500/well cost is like \$3 million to those making a few dollars per week. Contact me if you want to help - every \$1 gives a child safe water for a year! We will continue to develop and teach hygiene workshops to empower women like Elizabeth. All of us face many discouraging days ahead, both overseas and back home in Canada crisis of family, finances, faith or fortune. Just never forget that you don't roast a dog quickly!

Jim Gehrels Hydrogeologist Group Leader, Ministry of Environment

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