The Bit's Stuck!!!

(True Story Written by Ed)

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One of the worst things that can happen when you are drilling a well is for your bit to get stuck in a hole. Bits are expensive - ours can cost up to \$500 - and that is if you are in the US and can get them. We are way down here in Paraguay - usually drilling way out in the "interior" and trust me - the local "dispensa" (our equivalent of a convenience store - usually the front room of someone's house) does NOT stock spare bits! In addition, the bit is on the end of any number of feet of expensive drill rod - similarly unavailable in Paraguay. So here is the story.

We were drilling at the Methodist Seminary in the little town of Nembý, with the much appreciated help of a



team of guys from Alpharetta, Georgia, Methodist Church. All was going well - in fact - it was going GREAT! We were advancing the hole quickly - with almost no resistance. There were chips of sandstone coming up with the cuttings, but it was soft and not slowing us down. We had started with a good thick mud, but as we advanced the hole we thinned it down because the sand content in the mud kept going up - and we didn't want to ruin our mud pump. Plus - when the mud is too thick on the final drilling pass it can be difficult to clean up the well after the casing is set.

We were drilling the final pass with the 6 inch roller cone rock bit because of the sandstone layers that we were encountering. It is a real champ - it can cut



most of what we find here. But - we only have one of them! So, needless to say we did not want to loose it. As I said, all was going well. On Saturday afternoon we had drilled the final pass, and we were starting to pull the drill string to set the casing. We had found the water table at about 50 feet, and we drilled the well to 168 feet. We got the first rod out without incident - and then disaster struck - we couldn't pull the next rod! This had happened to us before, and I knew that we had to work fast to free up the bit. We worked and worked - but to no avail. What had happened is that the sand was collapsing around the bit and trapping it in the hole. The winch that we use to raise and lower the drill string is rated at 3,500 pounds, but it couldn't budge the bit. Damian, the big Paraguayan seminary student who was helping us pulled so hard on the bit that it actually bent the base of the drill rig. Finally, after working

well into the night, the winch actually broke and we decided to call it quits - I told the guys that we would try again early the next morning - Sunday.

This is where it gets interesting. The next morning I was reading my Bible and praying and God told me clearly - *don't work today*. I was not at all in favor of this approach - all that I knew and had learned told me that it was of the utmost importance to get that bit out of the hole - and NOW! I tried to argue - but the mandate was clear - *don't work today - it is Sunday - My day of rest - TRUST ME!* So, when the guys showed up I told them about God's instructions and we all had a very good Sabbath. I was at peace - and not really worrying about the bit. God had let me know that the drill rig was His and not mine, so just be calm.

Monday morning we measured 40 feet of sand on top of the bit! I talked it over with the guys, and mentioned that in Honduras when this happened we had used a tractor to free the bit. Damian immediately told us that he knew someone with a



a couple hours we had a stout Massey Ferguson backed over the hole. We used the "holy bar" and the implement lifting hydraulics hooked to a heavy chain wrapped around the drill rod to apply a LOT of pull. All was going well up to the point when the base of the drill rig dropped on Jorge's little toe! He was working in the mud pit barefoot (Paraguayans don't like to wear their shoes when working for fear that they will get messed up). It really mashed his toe - and I called to Linda to get the truck because we had a broken toe (see the <u>Mashed Toe Story</u>).

We kept on working, and with the help of a 3/4 inch PVC wash pipe hooked to the 5 hp mud pump to loosen the sand, the pipe STARTED COMING UP! We kept at it and by the end of the afternoon we had all of the pipe and the bit out of the hole! God had kept His promise!

After reflecting on all of this for a while - it seemed that three things went into this "lesson" that God had taught me. First - there was the "crisis". An event that seems to us to be a problem - but that God uses as a teaching opportunity. Second - it is important to spend time in prayer seeking God's instruction. Thirdly - we must be obedient to God's instructions. If we had tried to work Sunday - we would not have found the tractor (Damian had already told us the he did not work Sundays), and there is no way to know what would have happened - but I seriously doubt that it would have been a success. So my lesson from God from all this is - listen to Him, trust Him and learn from the lesson. Praise God!