

SMALL WARS JOURNAL

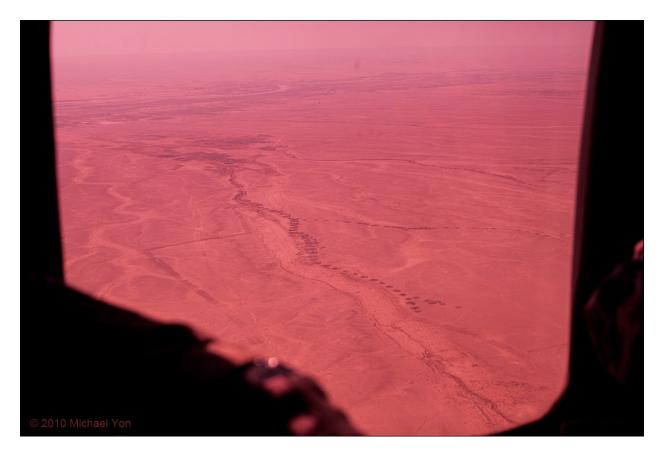
smallwarsjournal.com

Red Horse In the Desert of Death

Michael Yon



Some troops in Afghanistan go months without a shower. Major Ryan O'Conner, XO of the 1-17th Infantry, now in Kandahar Province, said that during a previous tour his Soldiers fought half a year without so much as a dip in a creek. Shortages of drinking water affected combat operations.



Karez in Kandahar Province, on the northern edge of the Dasht-i-Margo: the Desert of Death

For centuries, Afghans have dug underground irrigation tunnels called karez. The lines of craters in the photo above are shafts into a karez system. The shafts, which can be hundreds of feet deep, are used to lift out soil and stone while digging a karez. Karez can take years to build and are sometimes miles long. They are described as intricate constructions, often built by teams for hire, using father-to-son knowledge passed down through the centuries.



Karez in Kandahar Province

Thousands of handmade underground irrigation systems range from China, through Pakistan, Afghanistan, Iran, Iraq, down to Africa, up to Europe and around to the Americas.



In Afghanistan, during many wars, such as with Alexander the Great, the British, the Soviets, and today, karez have been used to hide villagers, fighters and weapons, or to move without detection.



Karez remain important in Afghanistan.



More Karez.



Village on the northern edge of Dasht-i-Margo.



Soon this will be green.

RED HORSE

(Red Horse Deployable Heavy Operations Repair Squadron Engineers)



FOB Frontenac, Kandahar Province

Water logistics is a high hurdle for Afghans, invaders, liberators and social shapers. Even upon my flimsy, unvarnished plywood desk are three bottles of water with three different labels:

Bottle #1 is labeled "Kinley Clean & Clear Drinking Water: A Quality Product of The Coca-Cola Company."

Bottle #2, "Cristal Quality Mineral Water" from "Afghanistan Beverage Industries Ltd. Kabul, Afghanistan."

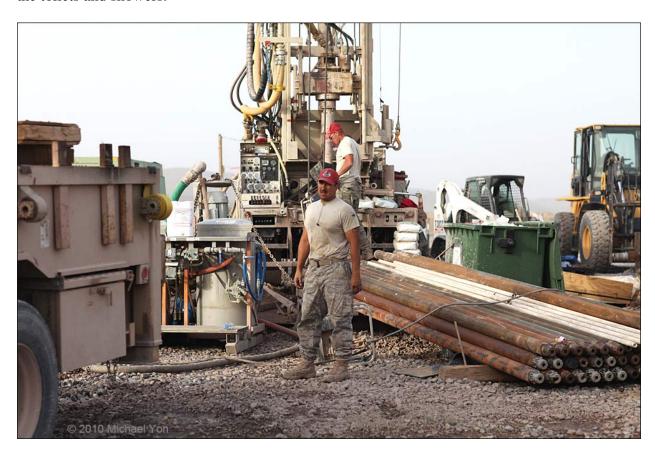
Bottle #3, "Masafi Pure natural mineral water from the foothills of the Masafi Mountains," bottled in the U.A.E. and with a website, www.masafi.com.

The showers have signs that say things like:

Combat Showers Only
Limit, three minutes
How to take a combat shower

- 1) Turn on water
- 2) Wet body
- 3) Turn off shower
- 4) Soap and scrub
- 5) Turn on water
- 6) Rinse off Soap
- Done

FOB Frontenac happens to be nearby the Dala reservoir, created by the Dala Dam, which was created by Americans a couple generations ago. Unfortunately, most of the larger bases aren't blessed with reservoirs. At Frontenac, a local Afghan contractor is paid to take water from the lake reservoir—now gushing from snowmelt—and recharges the holding reservoir on base for the toilets and showers.



Drilling at Frontenac.

FOB Frontenac is a short helicopter leap from the international airport at Kandahar Airfield, where even 747s land. Today, in just about the middle of Frontenac, a tall water-drilling rig with

an American flag flapping in the noonday breeze signaled that someone was drilling for liquid for freedom. Freedom from the incredible logistics nightmare. (Or at least a little freedom.)



RED HORSE uses red lights on the rig, which makes it slightly harder for enemies to aim at night. No shots come into Frontenac these days, but it's better not to tempt chance.

The drillers are from the Air Force "809 RED HORSE." Four Air Force water-drilling crews and have been alternating on six-month tours to Afghanistan, having drilled thirteen wells. There are two RED HORSE drilling crews per rotation in Afghanistan. Seabees and others also are out there poking for water.

The crew lead is Tech Sergeant Nathan Laidlaw. TSgt Laidlaw explained that after RED HORSE crews begin drilling, they work 24/7 without a break; every hour spent on the hole is an hour that something could go wrong, causing wasted effort. The eight-man crew splits into two, and each works a 12-hour shift. Their improvised gym, just next to the rig, includes a steel rod with chains wrapped around each end for weight. Looks like something that Fred Flintstone might use.

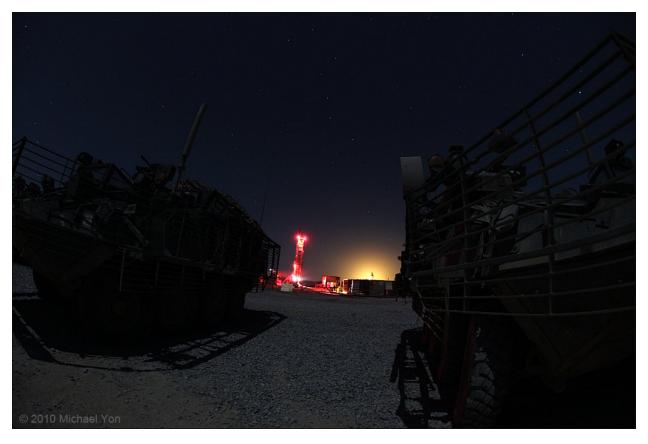


New 400' well at Frontenac

This crew's deepest well in Afghanistan was 1,260 feet at FOB Wolverine. TSgt. Laidlaw said they worked 45 days straight and finally got the water. Laidlaw also said that RC-East (Regional Command East) produces far more water than RC-South (here). In RC-East, according to TSgt Laidlaw, the wells have produced 45-200 gpm (gallons per minute), whereas the first well (of two) on Frontenac was 750 feet deep and trickles at 6gpm. According TSgt Laidlaw, for each soldier on a base like Frontenac, about 20 gallons per day can be needed, though use can vary widely. And so that 6gpm is only enough for maybe 400-500 soldiers, depending on many factors, such as if showers and toilets are used.

This team is stationed at Hurlburt Field, Florida. Laidlaw said that in Florida they can drill a 120' well in maybe a couple hours, but in Afghanistan that could take many days. Afghan well water is tested for contaminants, said Laidlaw, and so far the RED HORSE wells have been free of manmade pollutants, but contains naturally occurring substances like manganese. No harmful microorganisms have been found and the crew decontaminates the gear to prevent contaminating aquifer. Laidlaw said there are many aquifers but RED HORSE doesn't take from the shallow water because the Afghans tap shallow. Nevertheless, Afghan wells can be hundreds of feet deep and are hand-dug wells that can look like shafts to Hell.

No geological surveys have been done here since the 70s, he said, and so part of the job is to collect data. I asked Nathan if he ever struck black gold like in the Beverly Hillbillies, and Laidlaw said no, but they did find copper in RC-East. Chinese are already here for the copper.



A thirty-second walk from my bunk, these Strykers were parked waiting for a mission. While RED HORSE works on the lighted rig, the orange glow in the background is from parachute illumination near the Afghan Police at Dala Dam. A couple weeks ago, the Afghan National Police got attacked there. The enemy fired at the police and baited the ANP to chase. When the ANP raced off, their truck was hit with a bomb, killing two ANP. And so each night, our guys have been firing nightlights for the ANP.



Styrkers bathed in the glow of the rig, under the Milky Way. The bright streak is from an unmanned aircraft.



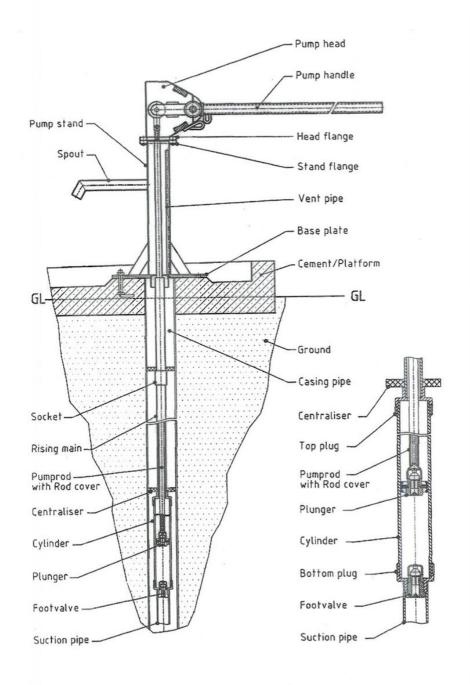
The Rig



This photo was made from just next to the RED HORSE rig. Looking closely, you can almost see the lunar karez.

Interesting sources have told me that the QST (Quetta Shura Taliban) in Pakistan are worried about losing the Arghandab River Valley to "the foreigners," which of course is us. There have been intercepts, I am told, wherein local leaders complain to the Taliban that we are beginning to provide substance while the Taliban is failing to provide anything more than violence, though in some places the Taliban are known to supply justice quicker and cheaper than can be had from the Afghan government. This battle for Arghandab (really for Kandahar) is far from won, but it appears that despite our own fumbling, we are at least outpacing the enemy. Though this well is for FOB Frontenac, water remains a perpetual concern for Afghans.

The 1-17th Infantry at Frontenac asked RED HORSE if they could leave base to check local wells that had been built over recent years by NGOs. I've seen these wells in different provinces. Apparently thousands of small wells costing probably millions of dollars must have been installed by NGOs since the war began. Yet many (or most in some areas) already do not work due to simple parts that have broken.



TSgt

Laidlaw found schematics of the wells built by the NGOs. He said that the problems seemed to be minor. For instance, a plunger was stuck in one well, and a pumprod was broken in another. Captain Jamie Pope told me that of 14 wells in one village, only one still worked. There seems to be some low-hanging fruit to pick. These shallow wells have already been drilled. Some might be dry, while others only need simple parts.



This well in Zabul Province (2008) is low-tech but it works. The line used to haul up the bucket is often a fan-belt from a truck. U.S. soldiers told me the man of the house (near well) was the father of a top Taliban figure who had escaped during a dramatic prison break in Kandahar.

Michael Yon is a former Green Beret who has been reporting from Iraq and Afghanistan since December 2004. No other reporter has spent as much time with combat troops in these two wars. Michael's dispatches from the frontlines have earned him the reputation as the premier independent combat journalist of his generation.



At the Fred Flintstone Gym: Right to left - TSgt Nathan Laidlaw (crew lead), SSgt Jason Dyer, SSgt Jason Williams, SSgt Rodolfo Pena, SSgt Randy Blount, SSgt Aaron Robles, Senior Airman (SrA) Steven Brewer, SSgt Cody Barboza.



A simple story deserves a simple ending.

THE END

This is a single article excerpt of material published in <u>Small Wars Journal</u>. Published by and COPYRIGHT © 2010, Small Wars Foundation.

Permission is granted to print single copies for personal, non-commercial use. Select non-commercial use is licensed via a Creative Commons BY-NC-SA 3.0 license and per our <u>Terms of Use</u>. We are in this together.



No FACTUAL STATEMENT should be relied upon without further investigation on your part sufficient to satisfy you in your independent judgment that it is true.

Contact: comment@smallwarsjournal.com

Visit www.smallwarsjournal.com

Cover Price: Your call. Support SWJ here.