

DIG

READY™

INDUSTRIAL GROUND THAW

A Real-World Comparison of
DIG Ready Industrial Ground Thaw
vs. Hydronic Ground Thawing System

Performed in the Bakken Oil Formation
Western North Dakota
On Site at a North Dakota Oil Pad
January 15-18, 2015



Summary of the Problem

During winter months, top oilfield service providers struggle in completing construction projects due to frozen ground inhibiting the building process. In the past, they have tried to combat this by:

- Jackhammering frozen ground with little to no progress
- Cutting through frost and thereby damaging important equipment
- Stopping construction completely until weather was ideal



Above: DIG Ready Industrial Ground Thaw working against the Hydronic Test System (to left of DIG Ready mats)

Hydronic as a Solution?

For years, service providers have used Hydronic Ground Thaw Systems to thaw ground during winter construction projects, only to deal with a multitude of other issues. These systems involved inconvenient mat-covered hoses, which would fire up from boilers and run hot glycol through them. Problems that occurred from this process included:

- Inconsistent thaw times
- Project sites becoming muddy and unmanageable if Hydronic Systems were able to “function” on the given terrain
- Glycol spilling out from Hydronic Systems, causing major environmental damage.



Above: DIG Ready Industrial Ground Thaw Mats (covered by concrete insulating blankets) melting North Dakota snow and frozen ground.

WINTER IS CANCELLED
www.DIGREADY.com 847-507-6422



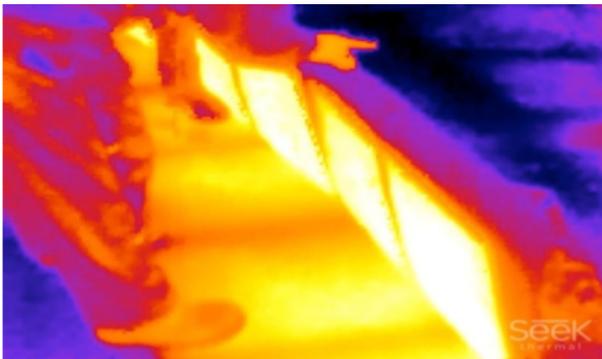
Testing A New Technology – DIG Ready Industrial Ground Thaw Mats

From January 15-18, 2015, an oilfield service company performed a direct, side-by-side comparison of the DIG Ready Industrial Ground Thaw and a standard hydronic glycol system on a 1,600 square foot space. Each system was placed on level ground and started at the same time. The test aimed to determine which technology was the most successful at thawing frozen ground over specific periods of time.

Results of Comparison

Systems Tested	After 10 Hours of Thawing	After 30 Hours of Thawing
DIG Ready Industrial Ground Thaw Mats	10 inches thawed	24 inches thawed
Hydronic System	0-3 inches thawed	0-3 inches thawed

After 10 hours of testing, the DIG Ready Industrial Ground Thaw system had thawed



over 10 inches of ground. The hydronic system had only thawed a few inches of ground and contained solid ice between the hoses. After 30 hours of testing, the two feet of ground under the DIG Ready Industrial Ground Thaw section had completely thawed. The hydronic section, however, faltered greatly and left only 0 inches to 3 inches of thawed ground.

Above: Infrared heat being emitted from the DIG Ready Industrial Ground Thaw.

The oilfield service company concluded that in one of the harshest winter regions in the United States, DIG Ready Industrial Ground Thaw was capable of thawing over 2 feet of ground every 30 hours. Other sites featuring deeper ground freezing were tested, but the service determined that DIG Ready Industrial Ground Thaw never took more than 48 hours to complete a task.

WINTER IS CANCELLED
www.DIGREADY.com 847-507-6422



Testimonials

"Within a couple of hours we became believers. The DIG Ready mats were not only thawing the ground, but processing the soil. We noticed the soil was thawing, but even better, it was drying the ground. When we broke through the frost you could literally shovel the soil like it was dry sand."



Before: DIG Ready Industrial Ground Thaw laid out to begin thawing.

"We look at this product as a real breakthrough. Thawing ground into mud is in the past. Drying the ground into usable soil is a game changer."



After: a clean, newly dug trench, thanks to DIG Ready!

"We were convinced this would not work. In the past we tried electric blankets. They were cheap, fell apart and did not really thaw anything. This product looked to be very durable but still was electric."

WINTER IS CANCELLED

www.DIGREADY.com 847-507-6422