



Oil Drilling Platform | Angle Energy
Olds Area, Alberta, Canada



The Problem

Unconfined, extremely wet, soft soils are susceptible to deep rutting after only a single pass by a loaded oil tanker.



GEOWEB® Aggregate Confinement System Creates Low-Cost, Low-Maintenance, Stable Oil Drilling Pads.

Background and Challenge

Year round access was required at a Northern Canada oil site for equipment to service and maintain a conventional well site pad. Several new wells were to be drilled on this same pad, and since this location was not tied into a pipeline, continual heavy tanker truck traffic would need to access the site.

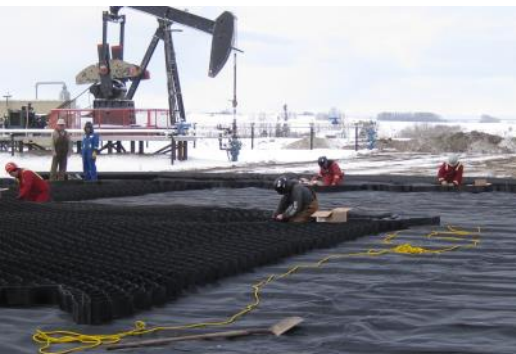
Due to very weak soil conditions, large ruts were continually being formed from the heavy vehicles. The challenge was to provide a solution that was less expensive than “Rig or Swamp Matting”, and that could be installed during winter construction season and left in place for the life of the lease.

The Solution

The GEOWEB 3D Soil Stabilization System and Mirafi’s HP270 high strength geotextile were chosen for this project as they provided the most cost-effective solution considering the project parameters—wet, low-strength soils, numerous passes from heavy vehicles, budget and time constraints.



Site Support. Presto’s Canadian distributor Layfield Group, Alberta, provided on-site installation training and oversight.



Completed GEOWEB Reinforced
Drilling Platform

Fast, Easy Installation

Installation was completed in less than one day. The owner had provided a small crew of six to assemble and deploy this project. After an initial 'tool box' meeting and installation training, the 8,400 m² pad (70m x 120m) was installed at 9:00 am and finished before 2:00 pm.

Performance Results

Bearing capacity of the thin 200mm lift of gravel was substantially improved using the GEOWEB material and the Mirafi HP270 high strength textile for separation and reinforcement. Through the effects of confinement, the system creates an additional 150 Kpa of cohesion to supplied granular material, creating a **stable platform that withstands heavy truck traffic and resists rutting.**

GEOWEB 3D Confinement Technology

Pads and roads built with GEOWEB 3D geocells and aggregate infill are extremely stable and well-suited to support heavy truck and equipment access. The confined aggregate surface provides a **high resistance to rutting** and **requires virtually no maintenance.** Local, low-cost fill may be used for additional savings. GEOWEB sections are easy to deploy and install with local crews, even in remote or difficult-access locations.

BENEFITS TO THE OWNER Angle Energy

The cost of the permanent GEOWEB pad including granular fill is less than the cost to rent matting for the season. The system provided a **stable year round platform** from which the owner can work safely and effectively while **lowering the operational and maintenance costs.**

GEOWEB Benefits for Pads & Roads:

- Lower cost solution than other alternatives—even renting mats!
- Low maintenance surface with minimal rutting
- Ability to utilize local labor & materials

See More GEOWEB Oil & Gas Solutions >>

An Idea to
Consider for
your Project?



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Project Evaluation

