

GEOWEB®

REINFORCED OIL AND GAS ACCESS ROADS

ALBERTA, CANADA



DEVON CANADA CORPORATION

The Canadian oil producer, Devon Canada Corp, Lloydminster, Alberta, employed the Geoweb® system on its access roads and drilling pads to reduce expensive aggregate and operational maintenance requirements.

THE CHALLENGES:

Devon's access roads are typically designed to handle construction, drilling and completions equipment with loads exceeding 125,000 lbs (15,000 lbs. wheel loads). Access roads to oilfield sites in the Alberta oil sands region are built over very soft subgrade such as muskeg and saturated clay or in areas where suitable fill material is scarce or very expensive.

Presto Geosystems and their distributor Layfield Group designed and supervised the installation of two test access roads 7-9 m wide (23-30 ft). The road cross section was designed for a soft clay subbase with a CBR of 0.9.

THE SOLUTION & PERFORMANCE:

The Geoweb system and a high strength, high flow geotextile were supplied. To prove the performance of the Geoweb system and its ability to save infill costs, Layfield recommended that a reject screening from crushing operations (coarse sand <5mm (0.2 in) be used as infill instead of aggregate. The use of the Geoweb system was able to reduce the cross section of typical haul roads from 1.5m (5 ft) to less than 300mm (12 in).

The Geoweb roadways have performed to expectations and have been employed on other oil field lease roads and pads.

"We did not like the material, we loved it. The roads have been performing way above our highest expectations"

Ron Thompson, Construction Procurement Manager
Devon Canada Corp

GEOWEB® SYSTEM ADVANTAGES

- creates a stable driving surface, even over soft ground
- reduces overall cross section of stone (average 50-85%)
- may allow use of on-site or waste fill
- transports easily and deploys quickly
- requires minimal maintenance

