

OIL SANDS HAUL ROAD

Alberta, Canada

GEO PRODUCTS, LLC | ENVIROGRID® GEOCELL

Background

Devon Energy was seeking a cost-effective yet sustainable way to construct haul roads for native soils were soft wetlands with cold winters and warm summers, creating a freeze-thaw condition of soils. The ability to use less expensive on-site material to build the roads while still supporting heavy loads under these conditions were the primary benefits of using EnviroGrid® over alternative methods.

Technical Information

MATERIALS USED:

EnviroGrid® EGA 30 6"
Nonwoven Geotextile

APPLICATION:

Base Stabilization

PROJECT LENGTH:

12 week installation
8-Man Crew



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Design Solutions

The EnviroGrid® confines the sand infill and impedes the lateral movement, increasing its structural strength. A 6" layer of geocell is sufficient for the 80,000lb loads of the industrial trucks. EnviroGrid® creates a floating layer over the unstable soils.



Construction Overview

The roads were graded and compacted and the EnviroGrid® panels were installed over a nonwoven geotextile fabric. The EnviroGrid® was filled with local sands and overfilled by 2 inches. The filled EnviroGrid® was compacted and ready for traffic.



Results

EnviroGrid® provided a reliable system to construct the haul roads over the existing soft soils using locally available infill material. The confinement system keeps the non-cohesive material in place and provides stability to once poor load bearing material.

