

Case Study



The information in this case study is reprinted from the American Cyanamid AM-9 technical manual. AM-9 was American Cyanamid's acrylamide grout product. Avanti's AV-100 Chemical Grout matches the chemical formulation, usage and performance of AM-9.

Title: Improving Oil Production in a Water Flood Project

Location: Payne County, Oklahoma, U.S.A.

PROBLEM:

Water was pumped down a well to displace petroleum from the oil-bearing formation into an oil producing well (No. 5, lease 'B').

SOLUTION:

The oil production well (No. 5) watered out prematurely (i.e., stopped producing oil and produced only water). A shut-in test of Well No. 50 showed it to be responsible for the loss in production in Well No. 5. A tracer confirmed the channeling by moving 600 feet from the input to the producing well in two hours.

APPLICATION:

1,200 gallons of AM-9 Chemical Grout was injected into the thief zone in Well No. 50, followed by acidizing and detergent wash.

RESULTS:

Before treatment, Well No. 5 produced zero barrels of oil per day. Water was being injected into Well No. 50 at a rate of 780 barrels per day at surface vacuum.

After treatment, Well No. 5 commenced producing 37 barrels of oil per day. Water was injected into Well No. 50 at a rate of 340 barrels per day at 400 psi surface pressure.