



Case History Manville Gas

Zone: Mannville **Type:** Pumping gas well
Oil: 0.45m³ **Gas:** 2.75 E³M³ **Water:** 3.87m³

History: This well had been worked over in the past using water from another formation for kill fluid. It was thought that the clays in the Mannville zone might have swelled because of this. The well also produces a very thick tar-like hydrocarbon.

Testing: Testing was conducted on wellhead samples to evaluate products that would dissolve this heavy hydrocarbon and provide wettability characteristics.

Product: The Petrotreat AO33 Asphaltene Solvent provided the best solvency and offered strong wetting performance. When combined with the Petrotreat APM43 Mutual Solvent at a 20% ratio, the wettability was increased significantly. The APM43 helps to reduce interfacial tension, which will help to move gas and fluids through the clays when they have swelled.

Treatment: The well was stimulated with 2400 litres of Petrotreat AO33 Asphaltene Solvent mixed with 630 litres of Petrotreat APM43 Mutual Solvent. This blend was squeezed back into the formation and allowed to soak for 24 hours.

Total Costs: \$7,824.00 (including pressure and tank trucks)

Results: The data reflected on the graph below illustrates how the well responded to the treatment. With a net back of \$170/m³ oil and \$110/E³M³ gas the treatment paid out in 13 days. The well is currently producing 5.10 E³M³ of gas and 2.20m³ of oil. After 31 days of production, the well has provided \$9,651 of incremental revenue over and above treatment costs and prior production values.

