

## CASE HISTORY

# VULCAN™ FLS 1.44 PROVIDES IMPROVED UNDERSTANDING OF THERMAL EOR

### APPLICATION

Thermal Enhanced Oil Recovery

### TECHNOLOGY

Vulcan™ FLS 1.44

### LOCATION

Russia, Komi Region (Usinsk)

### CUSTOMER CHALLENGE

The customer has been actively producing heavy oil for decades utilizing mine and thermal enhanced oil recovery methods. The operation involved injecting hot steam into the oil bearing reservoir to reduce the viscosity of the oil and stimulate flow. The challenge was to maintain constant production levels through the efficient distribution of steam in the formation, which can be easier through proper optimization and monitoring of steam quality. The remote well site location and extreme temperatures (315°C) added another level of difficulty.

### SCIENTIFIC SOLUTION

Scientific Drilling provided the customer with a superior understanding of the reservoir performance by deploying the Vulcan™ FLS (Flow Logging System) 1.44. The slimline 1.44" OD production logging tool includes the following sensors: gamma-ray/CCL, pressure, temperature, fluid density, and spinner. The FLS enabled the customer to obtain information regarding steam quality and gain a better understanding of the dynamics of thermal enhanced oil recovery.

### CUSTOMER VALUE

The customer was provided with data and analysis needed to effectively remedy operational and production deficiencies. SDI's equipment combined with decades of production logging experience allowed the customer to drastically reduce their logging operations from an average of 16 hours to just 4.5 hours, saving valuable time and money.



*Thermal Enhanced Oil Recovery Well Site*