

**Mobil Diesel Efficient™**

# Keep your engines cleaner and reduce downtime

Keep reading to learn how much money a Canadian mine saved just by having clean fuel injectors.

*Mobil Diesel Efficient™ fuel offers\*:*

- Improved engine power
- Improved fuel economy
- Decreased downtime
- Decreased maintenance cost
- Reduced emissions
- Meets ASTM D975 specifications



*Dirty*

*Clean*

**Injector spray pattern** (illustration purposes only)

A more even spray pattern for improved combustion with less CO<sub>2</sub> emissions and particulate matter.

\*Applies to Diesel Efficient-branded fuel compared to diesel fuel without detergent additive. Actual benefits and fuel economy will vary depending on factors such as vehicle/engine type, engine conditions, operating conditions and diesel fuel previously used.

## Proof of performance Canadian mine

†Esso Diesel Efficient™ fuel helped reduce fuel consumption, resulting in a potential annualized savings of **\$186,000 CAD\*** per year.

### Situation

A remote northern Canadian mine wanted to reduce fuel consumption of their generators and lower CO<sub>2</sub> emissions. The mine was using an ultra-low sulfur (S15) non-detergent diesel fuel in their power generators. The site is accessible overland via ice roads and experiences ambient temperatures ranging from -50°C to +30°C. As these generators were the primary source for the entire mine site, it was critically important that any solution not negatively impact the reliability of these units.

### Methodology

Esso Diesel Efficient™ fuel was used to evaluate its cleanup benefits on the power generators' fuel systems and its impact on fuel economy and emissions. A thorough Esso Diesel Efficient™ fuel test program was conducted with seven generators operating on Esso Diesel Efficient™ fuel. Generator data and historical fuel samples, along with maintenance records were examined. The information reviewed consisted of roughly three and a half years of hourly operating data across 30 parameters for all seven generators.

Esso Diesel Efficient™ fuel performance was compared to historical data for each generator regarding fuel consumption and CO<sub>2</sub> emissions, generator exhaust heat recovery, as well as fuel filter life and fuel system maintenance.

### Results

The field demonstration was conducted over approximately three and a half months, accumulating approximately 10,000 operating hours across the seven power generators. The positive feedback while operating with Esso Diesel Efficient™ fuel included:

#### Fuel economy improvement

Some level of fuel economy improvement was observed in all seven generators. The generator operating longest since last overhaul (i.e., oldest fuel system) showed the greatest benefit.

#### Reliability and other results

Exhaust heat recovery temperature remained within historical ranges. No fuel system issues, including no fuel filter plugging events, were experienced with the use of Esso Diesel Efficient™ fuel.



†Mobil Diesel Efficient™ and Esso Diesel Efficient™ are formulated with the same additive package, delivering the same benefits.