

DURON™ THE TOUGHER. THE BETTER.™ THE PROOF.



**Dominion
Diamond Mines**

CUSTOMER:

DOMINION DIAMOND MINES ULC,
NORTHWEST TERRITORIES, CANADA

RESULT: \$900K SAVINGS OVER 2 YEARS. EXTENDED DRAINS.



Beyond today's standards.™

*“We’ve achieved
**considerable cost
savings and gained
a trusted partner**
that understands our
business needs.”*

Shane Durgin, CEO, Dominion Diamond Mines



BACKGROUND

Dominion Diamond Mines has an integrated approach to corporate responsibility that encompasses all aspects of responsible business.

The Ekati Diamond Mine is Canada's first surface and underground diamond mine and officially began production in October 1998. To date, the Ekati Mine has produced approximately 80 million carats worth of diamonds.

Dominion's Canadian diamonds are among the most responsibly sourced in the world. Certified diamonds are carefully selected and inscribed with Dominion's Canadamark™ certificate number and trademark, a unique assurance of diamond quality and a guarantee of a completely natural diamond that is free from any improvement treatments.

Dominion manages a highly efficient operation, designed to minimize environmental impacts and integrate a responsible corporate approach across all aspects of the business.

Operating with integrity, Dominion places high standards on its approach to people, the communities and the environment in which they operate. Creating value for the long-term is key and is underpinned by specific commitments focused on building a culture of trust and respect for people and the environment, including:

- Prioritizing the health, safety and well-being of employees and contractors
- Respecting local northern and Indigenous communities and implementing mutually beneficial agreements that provide jobs, skills training and contracting opportunities
- Investing in community projects aimed at improving the quality of life of local residents, with a strong emphasis on youth wellness, literacy, education and traditional knowledge
- Maintaining environmental stewardship and operating under strict environmental laws relating to impact on land, air, water and wildlife

Dominion Diamond Mines is a Canadian diamond mining company and Canada's largest independent diamond producer.

Dominion owns and operates the Ekati Diamond Mine, which is situated approximately 200 kilometers south of the Arctic Circle in Canada's Northwest Territories.



THE CHALLENGE

Find a lubricant partner with a heavy duty engine oil that can deliver performance and cost savings in some of the most demanding operating conditions.

The climate in the Northwest Territories is typified by long, cold winters when temperatures can plunge to -40°C/°F. Dominion's Ekati Mine is only accessible year-round by air, except for an ice road that is open for approximately two months each winter.

With a fleet of more than 100 pieces of equipment, ranging from Caterpillar Haul Trucks to Loaders and Dozers, Dominion had two clear requirements of their oil provider:

1. Reduce vehicle downtime due to frequent oil changes
2. Deliver quicker and easier cold start-up in the Arctic conditions of the Northwest Territories

From a day-to-day operational perspective, Dominion needed an engine oil provider that could reduce maintenance costs, simplify lubricant inventory and mitigate the impact on production due to cold-start difficulties.

THE SOLUTION

A strategic partnership based on proof of performance and technical expertise.

Petro-Canada Lubricants' (PCL) DURON™ line of high performance engine oils have a proven track record of maximizing equipment performance, reducing equipment downtime, increasing productivity and ultimately saving customers money.

Indigenous Partners

Dominion started working with DURON Ultra High Performance 5W-40 oil in 2016, in partnership with Petro-Canada Lubricants' associate and fuel provider, **Denesoline Corporation**, a northern Indigenous business based locally in Yellowknife.

Demonstrating the capability of the oil was key. The PCL team, comprising both a Technical Service Advisor and Sales Account Manager, were involved right from the start of the project. They worked closely with the Ekati Mine lubricant specialist, maintenance supervisors and reliability engineers to help understand the challenges being faced by Dominion and offer personalized solutions. The PCL team were frequently onsite to attend technical meetings and address any questions or concerns in person.

Over a two-year period, DURON UHP 5W-40 was trialed across the Dominion fleet in addition to a series of value added services, including:

- Oil analysis support
- Technical consultation
- Best practice information sharing

“Together with Petro-Canada Lubricants, we have enjoyed helping Dominion achieve its objectives. It's become a true partnership based on mutual appreciation of the community in which we work and delivering a consistently reliable service.”

Iqbal Bhatti, Director Technical Applications, Denesoline



THE RESULTS

DURON™ UHP 5W-40, designed to meet the toughest demands of extreme heavy duty applications.

Overall, Petro-Canada Lubricants helped Dominion achieve considerable costs savings on equipment maintenance, in addition to improving fleet reliability during the harsh Arctic winters. By offering an all-season premium performance oil, PCL was also able to optimize Dominion's lubricant inventory.



Oil drain intervals in Dominion's heavy hauler vehicles extended by 50% (from 500 hrs to 750 hrs) when using DURON UHP 5W-40.

POTENTIAL SAVINGS: \$210K

- Oil drain intervals in Dominion's diesel-powered, self-propelled top-hammer drill rig with an extra-large engine oil reservoir extended by 100% from 500 hrs to 1,000 hrs.

POTENTIAL SAVINGS: \$12K

- Oil drain intervals in Dominions hydraulic shovels extended by 100% from 250 hrs to 500 hrs.
- Oil drain intervals in Dominion's dozers extended from 250 hrs to 500 hrs.

POTENTIAL SAVINGS: \$200K

- Oil drain intervals in Dominion's light duty vehicles and buses extended from an average 187 hrs to 500 hrs or even longer for some specific vehicles.

POTENTIAL SAVINGS: \$300K

- Across Dominion's five underground articulated trucks, drain intervals extended from 250 hrs to 500 hrs.

POTENTIAL SAVINGS: \$74K



DURON UHP 5W-40 is recognized for delivering excellent cold-start capabilities and reduction in idle time for Dominion mine mobile equipment.



As a direct result of switching to DURON UHP 5W-40, Dominion realized considerable annual savings, including reduced oil transportation and administrative costs, and improved optimization of warehouse space.

POTENTIAL SAVINGS: \$100K

As a result of these significant cost savings, maximized vehicle performance and increased productivity, Dominion has switched all equipment to DURON as its heavy duty high performance engine oil of choice.



Extended Drain



Extreme Temperature



Cost Savings

TOTAL SAVINGS: \$900K OVER 2 YEARS

“In the unique and challenging conditions at the Ekati Mine, DURON™ has proven to be successful in increasing the reliability of our equipment.”

Yen Garcia, Lubrication Specialist,
Dominion Diamond Mines



DURON.™ **THE TOUGHER.** **THE BETTER.™**

DURON UHP 5W-40 is an ultra high performance heavy duty engine oil that delivers all weather engine protection, including dependable cold start up and exceptional shear stability. It can deliver extended drain capabilities (exceeding OEM standard intervals)* and improve the overall bottom line of any business.

DURON heavy duty diesel engine oils are driven by API CK-4 and FA-4. They are the most durable, most protective, most advanced oils we've ever made. They are ready to improve your reliability, extend your drain intervals, and even cut your fuel costs – however extreme it gets. Because when you know your oil can handle extreme challenges, you know it can handle anything.

* Extended drain intervals should always be undertaken with an oil analysis program.





OUR NO-NONSENSE LUBRICANTS WARRANTY

“Petro-Canada Lubricants will repair damaged equipment, or replace damaged equipment parts resulting from a failure due to defects of the Petro-Canada lubricant, as long as the lubricant is used in accordance with your equipment manufacturer’s and our recommendations.”

It’s more than just a warranty. It’s a commitment.

To learn more about how Petro-Canada Lubricants can help your business visit: lubricants.petro-canada.com or contact us at lubecsr@petrocanadalsp.com

CERTIFIED
ISO 9001
ISO 14001
ISO/TS 16949



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