



**TOTAL**

**RUBIA**

HEAVY DUTY ENGINE OIL

# TOTAL RUBIA WORKS 4000 RANGE



[www.total-canada.ca](http://www.total-canada.ca)



**TOTAL**

Committed to Better Energy



# TOTAL RUBIA WORKS 4000 15W-40 & FE 10W-30

TOTAL RUBIA WORKS 4000 is a premium heavy duty CK-4 engine oil range, specifically developed for the most recent construction and mining machinery engines of the world leading manufacturers. TOTAL RUBIA WORKS 4000 range includes two heavy-duty products with an advanced formulation to optimize performance for excellent wear protection, improved piston cleanliness and exceptional oxidation control.

## RUBIA WORKS 4000 RANGE APPLICATIONS

RUBIA WORKS 4000 products are formulated with the most recent chemistry to be used in the newest high-performance diesel engines of off-road equipment.

### RUBIA WORKS 15W-40 & FE 10W-30

High-performance "Low SAPS" Diesel engine oils for the newest engines operating in extreme conditions.



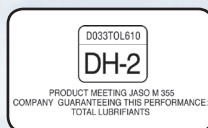
#### SPECIFICATIONS AND APPROVALS - 15W-40 & FE 10W-30

International specifications	ACEA E9/ E7	API CK-4/ CJ-4/ CI-4 plus/SN	JASO DH-2
Manufacturers' approvals	DEUTZ DQC III-10 LA	VOLVO VDS-4.5	
	Cummins CES 20086	MACK EO-S 4.5	MB-Approval 228.31
	MTU Category 2.1	RENAULT Trucks RLD-3	
Meets the requirements of	CATERPILLAR ECF-3 / ECF-2 / ECF-1a		
Recommended in engines	HITACHI, KOMATSU, LIEBHERR, CASE NEW HOLLAND, DEERE, ISUZU, JCB, MITSUBISHI, PERKINS...		

\*API service category SN is only applicable for the Rubia Works 4000 15W-40

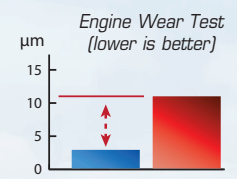
#### Excellent wear protection

Benefits to increase the life expectancy of your engine.



Both RUBIA WORKS FE 10W-30 and 15W-40 obtained excellent results. The Japanese JASO DH-2 standard is only awarded to engine oils which offer the best wear protection. RUBIA WORKS obtained excellent results, exceeding the JASO criteria.

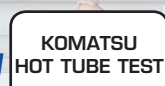
RUBIA WORKS FE 4000 10W-30  
Standard lubricant



Maximum change in cam axis diameter

#### Superior oxidation stability

Outstanding performance under high temperature and load.



RUBIA WORKS 4000 FE 10W-30 & 15W-40 passes Komatsu's stringent independent test which measures the oils ability to resist oxidation and deposit formation at high temperatures - a critical factor given Komatsu's 500 hour or more oil drain interval.

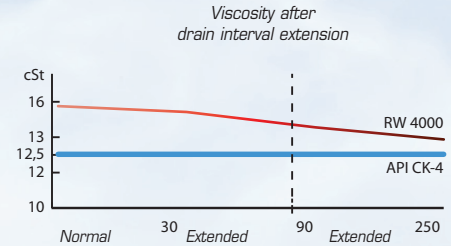
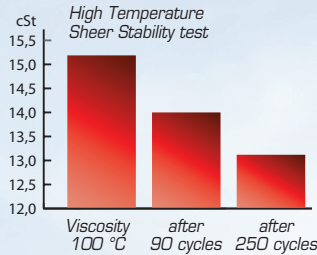
# RUBIA WORKS 4000 15W-40

A high-performance "Low SAPS" Diesel engine oil for the newest engines operating in extreme conditions.

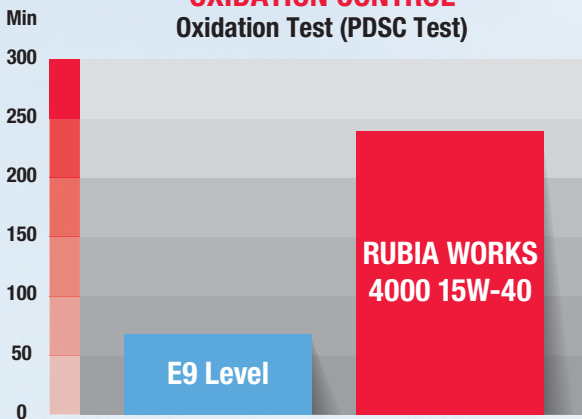


## Durability and longer drain intervals

❖ TOTAL RUBIA WORKS 4000 15W-40 provides excellent durability and extended drain intervals extension even during harsh, extreme operating conditions. The ability to keep the oil pressure stable and to provide maximum protection against wear are proven by the Shear Stability Test results. This test is used to determine an oil's ability to retain its viscosity over a number of cycles of injector shearing. TOTAL RUBIA WORKS 4000 15W-40 passes Kurt Orbahn diesel injector shear bench test, which is designed to simulate the permanent viscosity loss in heavy-duty diesel engines. This test is usually performed over 90 cycles but RUBIA WORKS 4000 15W-40 shows excellent performance even after 250 cycles!

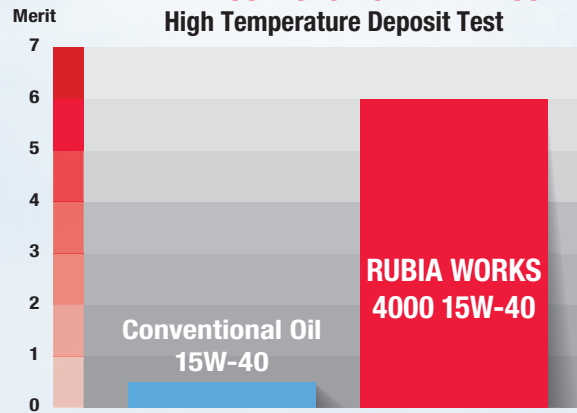


## OXIDATION CONTROL Oxidation Test (PDSC Test)



The detergent properties of Rubia Works 4000 15W-40 prevent piston deposits. It is 5 times more resistant than standard E9 lubricant. It exceeds 4 times the ACEA E9 minimum level.

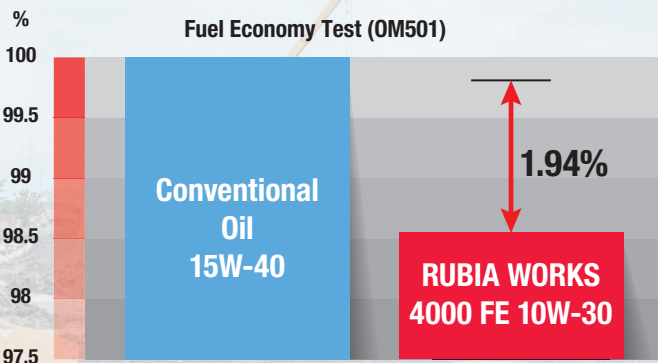
## FLAWLESS PISTON CLEANLINESS High Temperature Deposit Test



Helps engines run smoother at high temperatures by keeping engines up to 70% cleaner than most oils in the market.

# RUBIA WORKS 4000 FE 10W-30

A high-performance synthetic blend fuel economy Diesel engine oil for the newest engines operating in severe conditions.



According to the results of the Fuel economy test, RUBIA WORKS 4000 FE 10W-30 can achieve fuel savings of 1.94%. For example, a loader which uses 30 L/hour over a period of 1,000 hours can save more than 580 L/year.

Optimal FE benefits can be attained by using the Rubia Optima FE 10W-30 in conjunction with a high quality hydraulic oils such as Total Equivis.

### **A major player**

With our production, supply chain and commercial presence in more than 150 countries, we deliver a full range of lubricants.

### **Support and partnership**

Thanks to local technical presence, we provide a high level of service to optimize your Total cost of Ownership.

### **References & OEMs**

Total Lubricants cooperates with equipment manufacturers to create high-technology products for optimal performance and protection of your machinery.

5 good reasons for choosing TOTAL

### **Innovation & Research**

Total invests in biotechnologies to find the most suitable components to reach energy efficiency through formulations designed in our Research Centers.

### **Quality and environment**

Total Lubricants ISO 9001 certification is the guarantee of a long term commitment to quality. From the initial design stage, our R&D teams seek to develop products that minimize toxicity risks and environmental impact.

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Safety Data Sheets are available at [www.quickfds.com](http://www.quickfds.com)  
[www.total-canada.ca](http://www.total-canada.ca)



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