FIELD TRIAL REPORT
STATIONARY NATURAL GAS ENGINES

CHEVRON DELO ELC ADVANCED ANTIFREEZE/COOLANT

> "All test engines surpassed the 10,000 hour field trial target with some units exceeding 40,000 hours."

STUDY OVERVIEW

Conventional coolants are prone to silicate buildup and scale formation that can lead to blocked passageways which significantly reduces heat transfer efficiency. Delo ELC Advanced is specifically engineered with cutting-edge technologies to address these challenges and more. To evaluate and prove the performance of this advanced formulation, Chevron conducted a two-year field trial of Delo ELC Advanced in Caterpillar 3500/3600 and GE Waukesha Series Four gas compression engines to evaluate real world performance. The goal was to maintain acceptable levels of corrosion metals and inhibitors throughout a minimum test duration of 10,000 hours.

STATIONARY NATURAL GAS ENGINE FIELD TEST PARAMETERS

Key performance areas evaluated included pH, water content, inhibitor levels, and corrosion metal presence, followed by a post-test engine parts inspection.

Delo ELC Advanced Coolant Product Attributes:

- Next-generation, ethylene glycol-based NOAT formulation for extended life coolant system protection in both on- and off-highway applications
- Patented aluminum passivation technology reduces negative reactions with brazed aluminum radiators and other aluminum coolant system components
- 2-EHA free formula – ready for future industry mandates

CONNECT WITH A DELO SPECIALIST

Learn more about what the right lubricant can do for your operation at: www.chevronlubricants.com
Chevron Customer Sales Department: 1-866-354-4476 | **LUBE-TEK:** 1-800-582-3835

Chevron Delo®

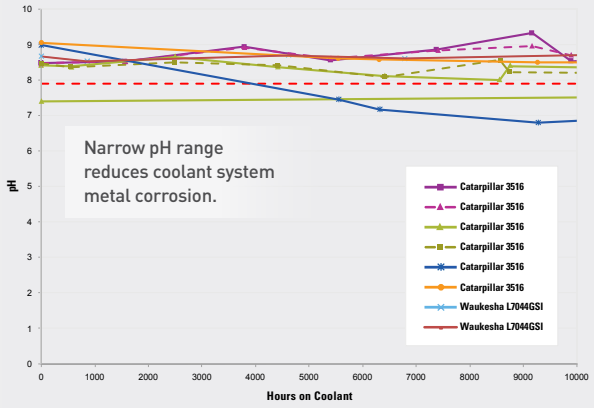
FIELD TEST RESULTS

DELO ELC ADVANCED COOLANT TEST

PH LEVELS

THREAT

Reduced pH levels can result in corrosion of cooling system metals. In glycol-based coolants, oxidation can lead to the formation of glycolates, lowering the pH.



PERFORMANCE

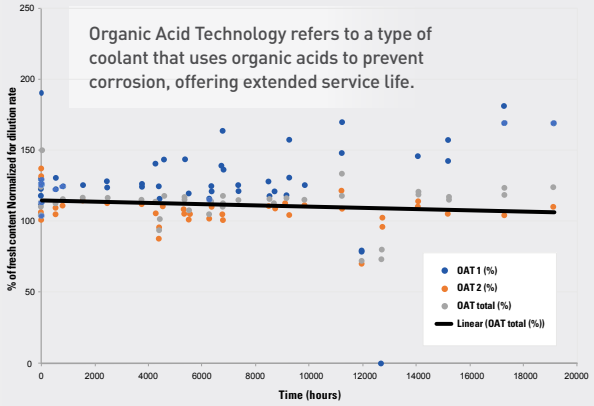
When testing a number of different engines over a period of 10,000 hours we saw **stable pH levels** indicating a reduced risk of deterioration in system metal components.

DELO ELC ADVANCED COOLANT TEST

CORROSION INHIBITORS

THREAT

Threat: The presence of component metals and deposits in the cooling system is an indication of corrosion.



PERFORMANCE

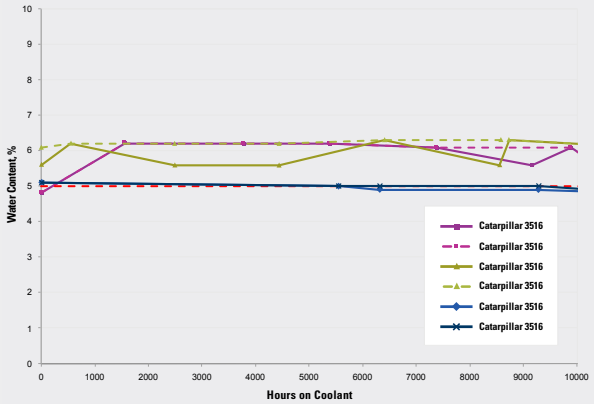
Over a period of 20,000 hours **advanced corrosion inhibitors remained at sufficient concentrations** to ensure extended metals protection.

DELO ELC ADVANCED COOLANT TEST

WATER CONTENT

THREAT

Roughly 10% of the previous cooling fluid remained in the system, impacting the concentration of available coolant additives.



PERFORMANCE

When testing a number of different engines over a period of 10,000 hours Delo ELC Advanced formulation showed **remarkable water stability and excellent protection** well past target drain intervals.

DELO ELC ADVANCED SURPASSED THE 10,000 HOUR SERVICE EXPECTATION

EXCEEDING 40,000 HRS

IN SOME TEST ENGINES.

The participating customer is now converting their entire fleet to Delo ELC Advanced Coolant.

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