

# WILLIAM ADAMS

## S.O.S<sup>SM</sup> COOLANT ANALYSIS



***“An estimated 50% of all engine failures or poor performance are linked to cooling system problems.”***

A cooling system has a direct effect on the operation and service life of an engine. Diesel engines are designed to operate at higher temperatures and higher energy levels than in the past. Today's heavy-duty diesels produce a tremendous amount of power from a small package. Cooling systems have to absorb more heat with smaller cooling systems and less coolant. A cooling system may also be transferring heat away from turbochargers, transmissions, hydraulic systems and other equipment components. A regular schedule of coolant sampling:

- Verifies the proper chemistry of your coolant.
- Diagnoses the condition of your cooling system.
- Allows you to correct coolant or cooling system problems before costly failures occur.

### COOLANT CHEMISTRY

**This involves an extensive chemical evaluation of the coolant.**

We measure Percent Glycol to calculate Boiling Point and Freezing Points.

Quantify additives like nitrite, phosphate, borate and silicate to determine if coolant still has protective properties.

### COOLANT CONDITION

**Identifies foreign impurities and gives the overall condition of the coolant and cooling system.**

Check for contamination to determine if anything harmful has entered such as the presence of oil or fuel.

Monitor Chloride and Sulphate to ensure a quality water source is used.

### COOLING SYSTEM HEALTH

**Results are interpreted to reveal any major problems or predict future failures and provide recommendations.**

Analyse for erosion and corrosion through elemental analysis of Iron, Aluminium, Copper, Lead, Tin and Zinc.

Look for signs of overheating, stray electrical currents and exhaust gas entry.

For example metal corrosion, caused by acidified coolant, due to combustion gas entry, needs immediate repair.

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# SOS<sup>SM</sup> COOLANT TESTS

Analysis	Description	Evaluation
Appearance	Clarity	Contamination
Color	Colour	Coolant Identification and Contamination
Odor	Smell	Coolant Condition & Contamination
Oil	Hydrocarbon	Engine or Fuel Contamination
Foam	Lather	Entrapped Air Bubbles Coolant Quality & Contamination
PAmt	Precipitate Amount	Debris Quantity
PApp	Precipitate Appearance	Debris Shape
PCol	Precipitate Colour	Debris Colour
PProp	Precipitate Properties	Debris Magnetic Properties
GL	Glycol	Anti-Freeze
FP	Freeze Point	Lowest Coolant Temperature
BP	Boiling Point	Highest Coolant Temperature
pH	Acidity	Corrosiveness
CON	Conductivity	Coolant Condition or Contamination
TH	Total Hardness	Water Quality
Fe	Iron	Primary Compartment Corrosion
Cu	Copper	Cooler Core Corrosion
Al	Aluminium	Cooler Core Corrosion
Pb	Lead	Solder Corrosion
Sn	Tin	Solder Corrosion
Zn	Zinc	Solder Corrosion
K	Potassium	Coolant Additive
Na	Sodium	Coolant Additive
NO2	Nitrite	Coolant Additive
Mo	Molybdenum	Coolant Additive
MoO4	Molybdate	Coolant Additive
BO3	Borate	Coolant Additive
SiO3	Silicate	Coolant Additive
PO4	Phosphate	Coolant Additive
NO3	Nitrate	Coolant Additive By-Product
GLO	Glycolate	Anti-Freeze By-Product
CL	Chloride	Water Quality
SO4	Sulphate	Water Quality or Combustion Entry

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## SOLUTIONS

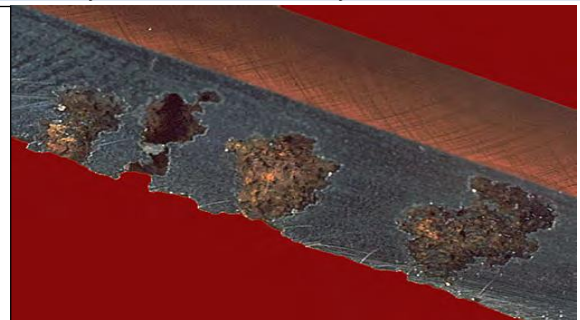
=> Find out more about S•O•S<sup>SM</sup> FLUID ANALYSIS.

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## PARTS

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Order Online or Call:

# 1300 WADAMS

	Part Number	Price Inc. Gst	
<b>COOLANT</b>	<b>SOS004</b>	<b>\$34.10</b>	
<b>OIL</b>	<b>SOS003</b>	<b>\$33.10</b>	
	<b>SOS002</b>	<b>\$341</b>	(Pack of 10 Inc. Express Post Bags)
	<b>SOS3TANBN</b>	<b>\$46.20</b>	Oil + TAN/TBN tests
<b>DIESEL FUEL</b>	<b>SOS003</b>	<b>34.10</b>	Limited Tests
	<b>SOS009</b>	<b>264</b>	1 Litre Tin Full Tests
<b>FILTERGRAM</b>	<b>SOS3FILTER</b>	<b>117.70</b>	