



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
1842
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0870820	---	---
Sample Date		Client Info		27 Nov 2023	---	---
Machine Age	mls	Client Info		4083	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				ATTENTION	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	52	---	---
Chromium	ppm	ASTM D5185m	>20	1	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	11	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	76	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

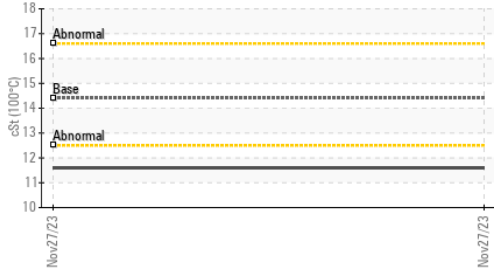
Silicon	ppm	ASTM D5185m	>25	29	---	---
Potassium	ppm	ASTM D5185m	>20	33	---	---
Fuel	%	ASTM D3524	>5	1.9	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.4	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

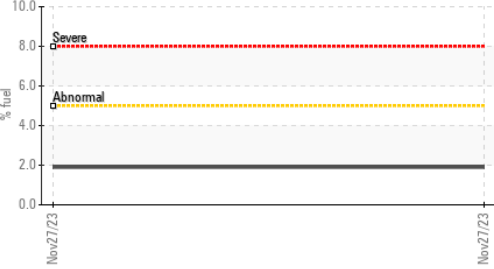
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	7	---	---
Boron	ppm	ASTM D5185m	250	36	---	---
Barium	ppm	ASTM D5185m	10	8	---	---
Molybdenum	ppm	ASTM D5185m	100	47	---	---
Manganese	ppm	ASTM D5185m		5	---	---
Magnesium	ppm	ASTM D5185m	450	722	---	---
Calcium	ppm	ASTM D5185m	3000	1122	---	---
Phosphorus	ppm	ASTM D5185m	1150	752	---	---
Zinc	ppm	ASTM D5185m	1350	855	---	---
Sulfur	ppm	ASTM D5185m	4250	2345	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.4	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.6	---	---

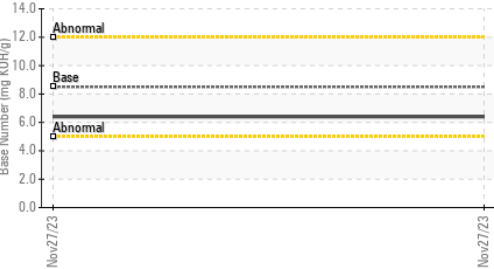
▲ Viscosity @ 100°C



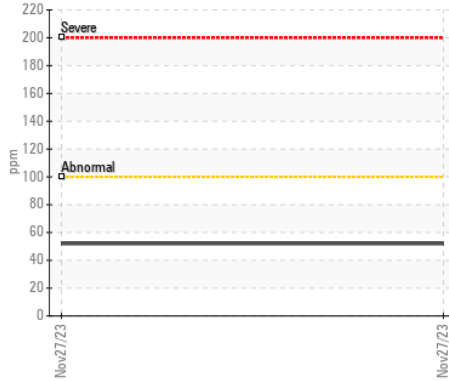
Fuel Dilution



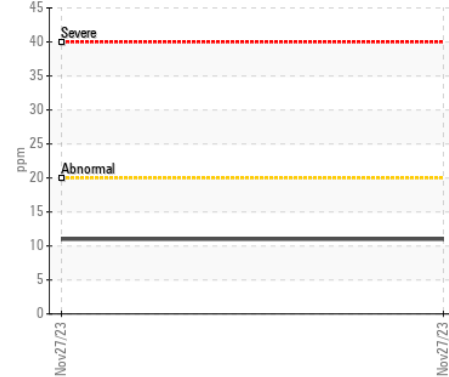
Base Number



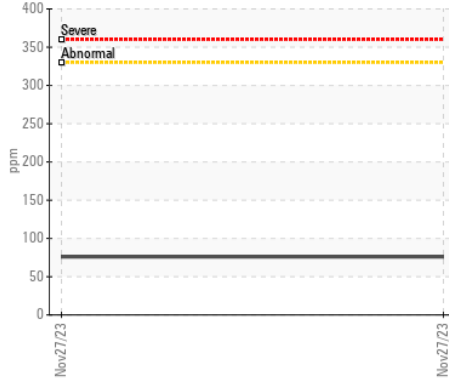
Iron (ppm)



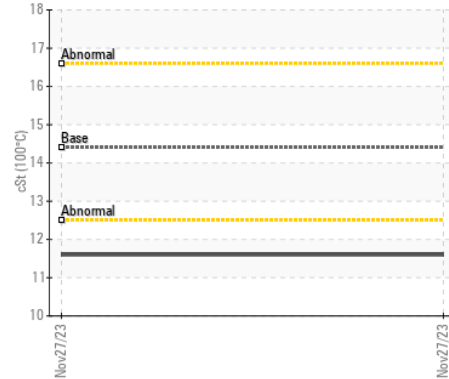
Aluminum (ppm)



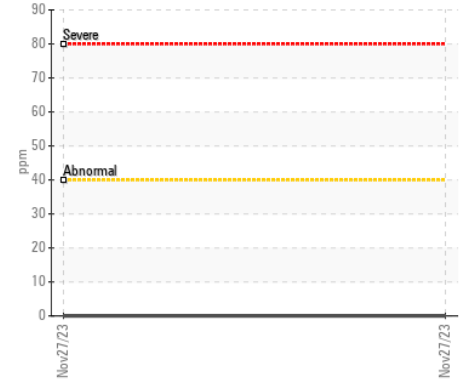
Copper (ppm)



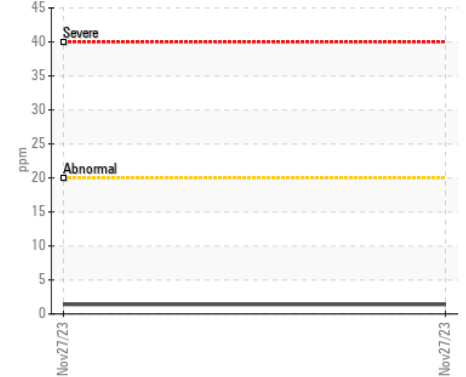
▲ Viscosity @ 100°C



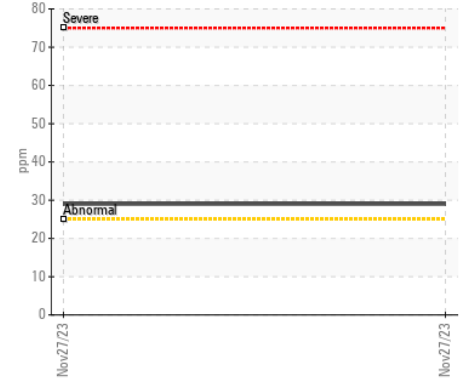
Lead (ppm)



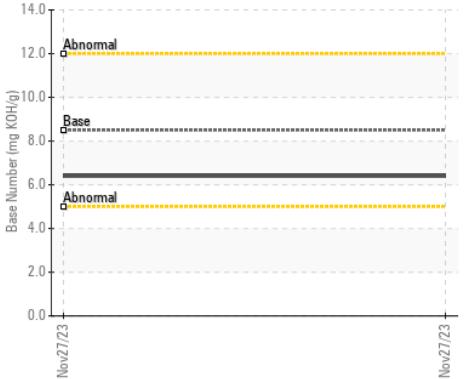
Chromium (ppm)



Silicon (ppm)



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0870820 Recieved : 12 Jan 2024
 Lab Number : 06059817 Diagnosed : 16 Jan 2024
 Unique Number : 10831199 Diagnostician : Don Baldrige
 Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

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 F: x:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)