



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1322611
Component
Diesel Engine
Fluid
S1300 10W30 (--- GAL)

RECOMMENDATION

We advise that you check for a possible ruptured fuel pump diaphragm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0036866	---	---
Sample Date		Client Info		05 Mar 2024	---	---
Machine Age	mls	Client Info		19695	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	34	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	6	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	58	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

There is no indication of any contamination in the oil.

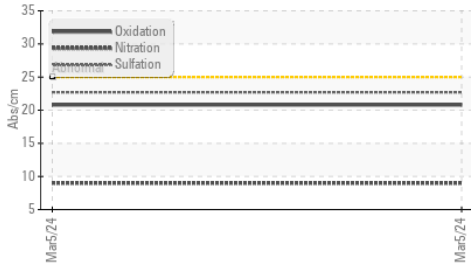
Silicon	ppm	ASTM D5185m	>25	16	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Fuel	%	ASTM D3524	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.4	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.0	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	---	---
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m		49	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		38	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		456	---	---
Calcium	ppm	ASTM D5185m		1619	---	---
Phosphorus	ppm	ASTM D5185m		794	---	---
Zinc	ppm	ASTM D5185m		917	---	---
Sulfur	ppm	ASTM D5185m		2764	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.7	---	---
Visc @ 100°C	cSt	ASTM D445		10.8	---	---

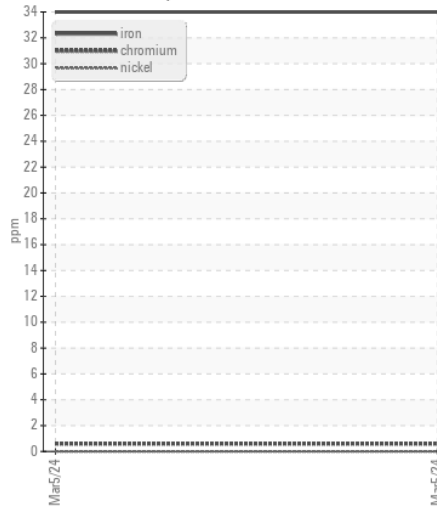
FT-IR (Direct Trend)



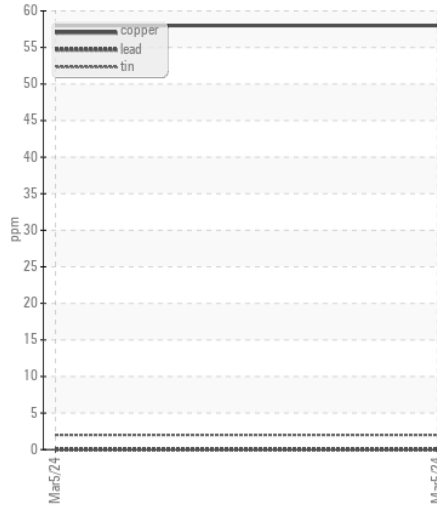
Base Number



Ferrous Alloys



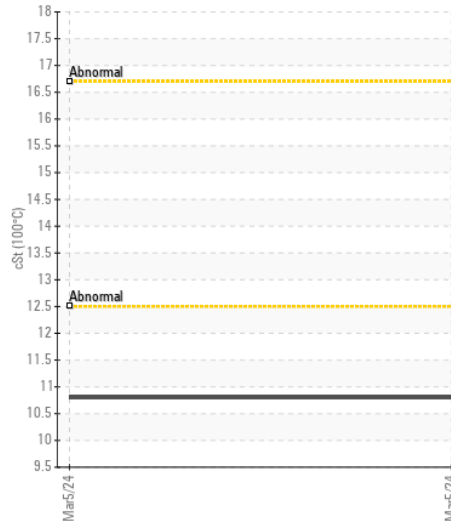
Non-ferrous Metals



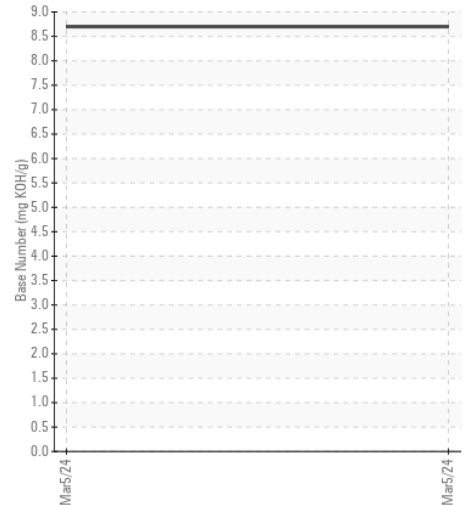
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0036866 **Received** : 17 Jul 2024
Lab Number : 06239696 **Tested** : 19 Jul 2024
Unique Number : 11128530 **Diagnosed** : 19 Jul 2024 - Sean Felton
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

IDEALASE-NORCROSS
 4571 NORTH BUFORD HWY
 NORCROSS, GA
 US 30071-2808
 Contact: RICK MARKS

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)

T:
 F: (770)300-0614