

Machine Id
207
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LF0001763	LF0001677	---
Sample Date		Client Info		25 Feb 2024	11 Dec 2023	---
Machine Age	hrs	Client Info		0	25274	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	MARGINAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	28	15	---
Chromium	ppm	ASTM D5185m	>20	1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	1	---
Lead	ppm	ASTM D5185m	>40	2	<1	---
Copper	ppm	ASTM D5185m	>330	4	3	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

Light fuel dilution occurring.

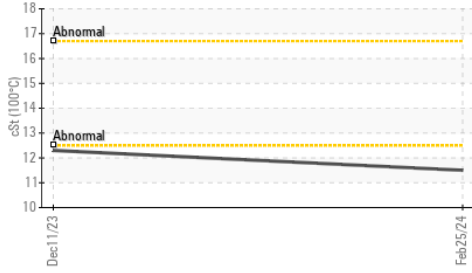
Silicon	ppm	ASTM D5185m	>25	6	6	---
Potassium	ppm	ASTM D5185m	>20	5	2	---
Fuel	%	ASTM D3524	>5	▲ 4.1	▲ 2.8	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.8	6.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	20.4	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

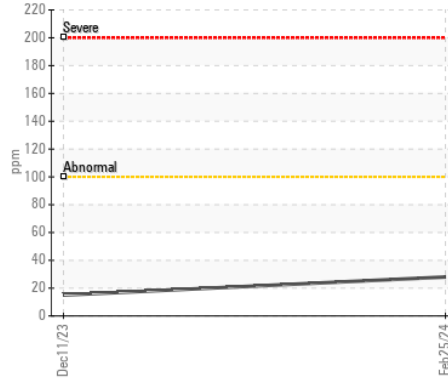
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		40	13	---
Boron	ppm	ASTM D5185m		19	37	---
Barium	ppm	ASTM D5185m		0	11	---
Molybdenum	ppm	ASTM D5185m		59	53	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		575	486	---
Calcium	ppm	ASTM D5185m		1615	1425	---
Phosphorus	ppm	ASTM D5185m		808	771	---
Zinc	ppm	ASTM D5185m		966	906	---
Sulfur	ppm	ASTM D5185m		2475	2846	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	17.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.2	9.3	---
Visc @ 100°C	cSt	ASTM D445		▲ 11.5	12.3	---

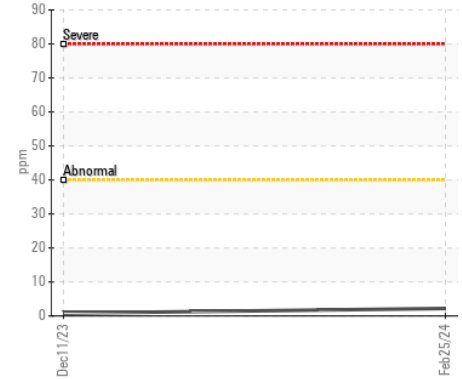
▲ Viscosity @ 100°C



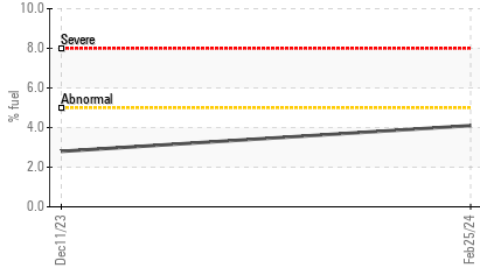
Iron (ppm)



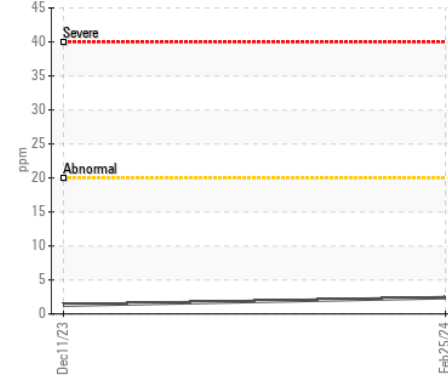
Lead (ppm)



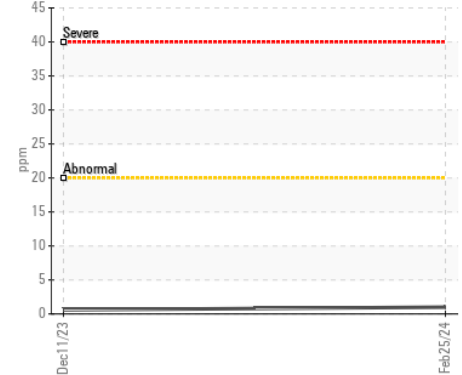
▲ Fuel Dilution



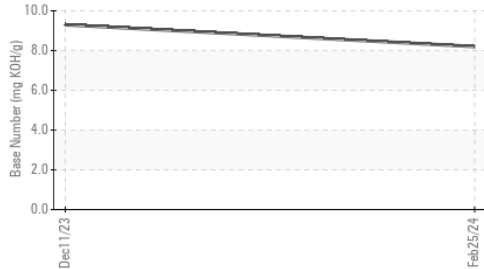
Aluminum (ppm)



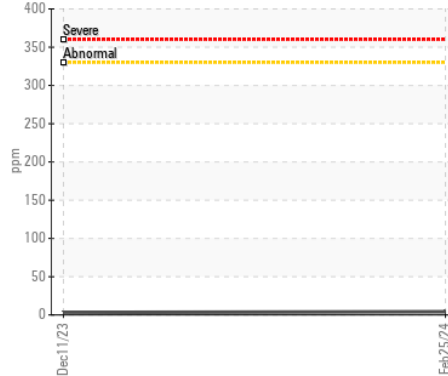
Chromium (ppm)



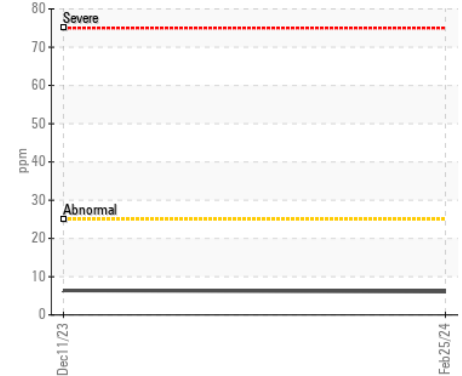
Base Number



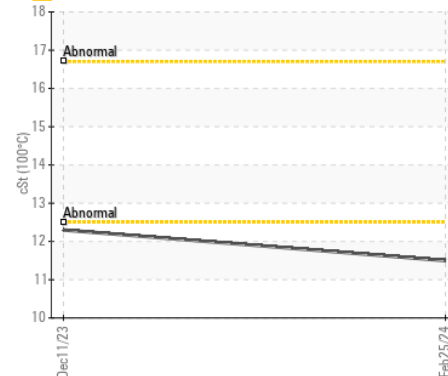
Copper (ppm)



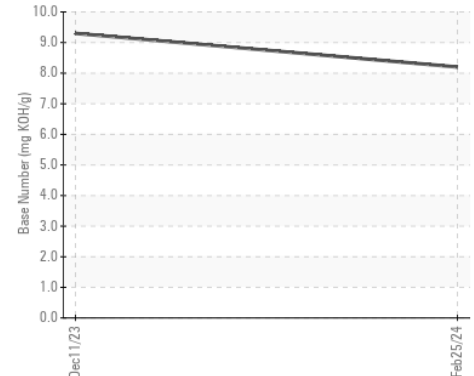
Silicon (ppm)



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : LF0001763

Lab Number : 06100821

Unique Number : 10899051

Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 26 Feb 2024

Tested : 29 Feb 2024

Diagnosed : 29 Feb 2024 - Wes Davis

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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)