

Machine Id **41314** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		WC0883263	WC0795945	WC0649897
	Sample Date		Client Info		02 Feb 2024	31 May 2023	03 May 2022
	Machine Age	mls	Client Info		288864	0	262130
	Oil Age	mls	Client Info		17000	0	0
	Filter Age	mls	Client Info		17000	0	0
	Oil Changed		Client Info		Changed	Changed	N/A
	Filter Changed		Client Info		Changed	Changed	N/A
	Sample Status		0.10111110		NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	31	26	17
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	2	2	2
	Nickel	ppm	ASTM D5185m	>4	0	0	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	<1
	Aluminum	ppm	ASTM D5185m	>20	2	3	2
	Lead	ppm	ASTM D5185m	>40	2	0	2
	Copper	ppm	ASTM D5185m	>330	1	1	<1
	Tin	ppm	ASTM D5185m	>15	1	0	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
					•••••		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	4	3
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	0	<1	<1
	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.8	0.6	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	10.5	10.3	9.5
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	22.0	21.9
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	2	2
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		<1	2	9
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m	100	64	64	58
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	959	974	879
	Calcium	ppm	ASTM D5185m	3000	1101	1256	1304
	Phosphorus	ppm	ASTM D5185m	1150	1006	1081	1073
	Zinc	ppm	ASTM D5185m	1350	1261	1330	1236

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m 4250

ASTM D445 14.4

Abs/.1mm *ASTM D7414 >25

Base Number (BN) mg KOH/g ASTM D2896 8.5

17.2

8.7

13.1

3151

17.6

5.7

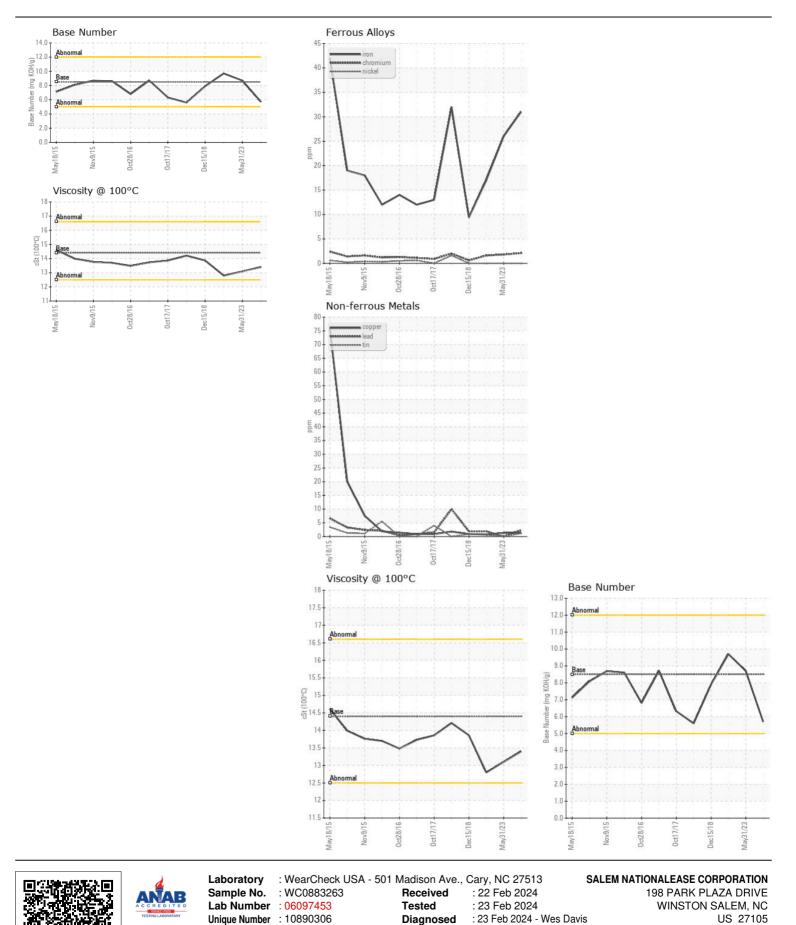
13.4

16.1

9.7

12.8

4063 3018



Test Package : FLEET **Contact: Audrey Hopkins** Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. Audrey.Hopkins@salemcorp.com * - 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)

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