

## Machine Id 624573 Component Diesel Engine Filuid DIESEL ENGINE OIL SAE 15W40 (20 QTS)

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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		IL0036538	IL0028215	IL0024578
	Sample Date		Client Info		04 Apr 2024	01 Nov 2022	30 Jun 2022
	Machine Age	mls	Client Info		183402	125363	110127
	Oil Age	mls	Client Info		14936	15236	12527
	Filter Age	mls	Client Info		14936	15236	12527
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	ATTENTION	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	29	37	44
	Chromium	ppm	ASTM D5185m		<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	<1	0
	Titanium	ppm	ASTM D5185m	- 1	<1	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		5	4	7
	Lead	ppm	ASTM D5185m		<1	<1	0
	Copper	ppm	ASTM D5185m		1	<1	1
	Tin	ppm	ASTM D5185m		<1	<1	<1
	Vanadium	ppm	ASTM D5185m	210	<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
			violati	····		HORE	HONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	4	6
	Potassium	ppm	ASTM D5185m	>20	3	3	4
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	1.1	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.4	0.6	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	11.6	13.0	12.7
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	23.5	24.3
	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	>158	0	2	3
TEOD CONDITION	Boron	ppm	ASTM D5185m		3	14	32
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		2	0	0
	Molybdenum	ppm	ASTM D5185m		72	61	45
	Manganese	ppm	ASTM D5185m	100	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	937	756	546
	Calcium	ppm	ASTM D5185m		1123	1420	1847
	Phosphorus	ppm	ASTM D5185m		1034	886	781
	Zinc	ppm	ASTM D5185m		1192	1141	957
		PPIII		1050	1152	0100	0100

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

22.4

8.2

12.3

3192 3128

25.3

8.9

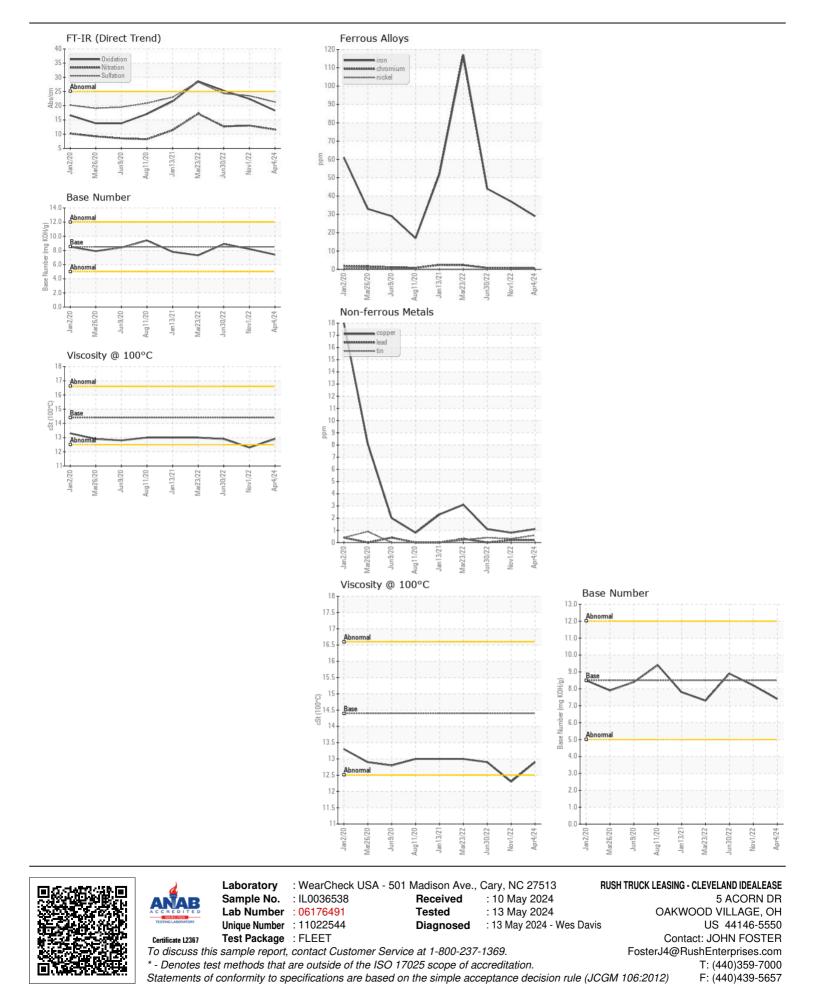
12.9

3279

18.3

7.4

12.9



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Submitted By: TECHNICIAN ACCOUNT Page 2 of 2