

Machine Id **1FF250GXVNF612072** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 40 (--- GAL)**

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		JR0192750	JR0189195	
	Sample Date		Client Info		20 Feb 2024	03 Oct 2023	
	Machine Age	hrs	Client Info		990	514	
brand, type, and viscosity of the off off your next sample.	Oil Age	hrs	Client Info		476	514	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
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WEAR Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m		24	24	
	Chromium	ppm	ASTM D5185m		<1	1	
	Nickel	ppm	ASTM D5185m	>4	6	4	
	Titanium	ppm	ASTM D5185m	0	<1	<1	
	Silver Aluminum	ppm	ASTM D5185m ASTM D5185m		0	0 5	
	Lead	ppm	ASTM D5185m		5 1	0	
	Copper	ppm	ASTM D5185m		231	407	
	Tin	ppm	ASTM D5185m		1	1	
	Vanadium	ppm ppm	ASTM D5185m	>15	۱ <1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
		304141	Visual			NONE	
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>25	8	7	
	Potassium	ppm	ASTM D5185m	>20	1	2	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844		0	0.5	
	Nitration	Abs/cm	*ASTM D7624	>20	5.4	8.1	
	Sulfation	Abs/.1mm	*ASTM D7415		19.4	21.9	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance Odor	scalar	*Visual *Visual	NORML NORML	NORML NORML	NORML NORML	
	Emulsified Water	scalar	*Visual	>0.2	NORME	NEG	
		scalar	visuai	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>216	3	3	
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	250	173	292	
	Barium	ppm	ASTM D5185m	10	<1	0	
	Molybdenum	ppm	ASTM D5185m	100	241	121	
	Manganese	ppm	ASTM D5185m		1	2	
	Magnesium	ppm	ASTM D5185m	450	855	510	
	Calcium	ppm	ASTM D5185m		1557	1608	
	Phosphorus	ppm	ASTM D5185m	1150	896	1112	

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

1394

16.6

6.5

12.9

3352

1091

2726

14.1

10.2

13.5

ASTM D5185m 1350

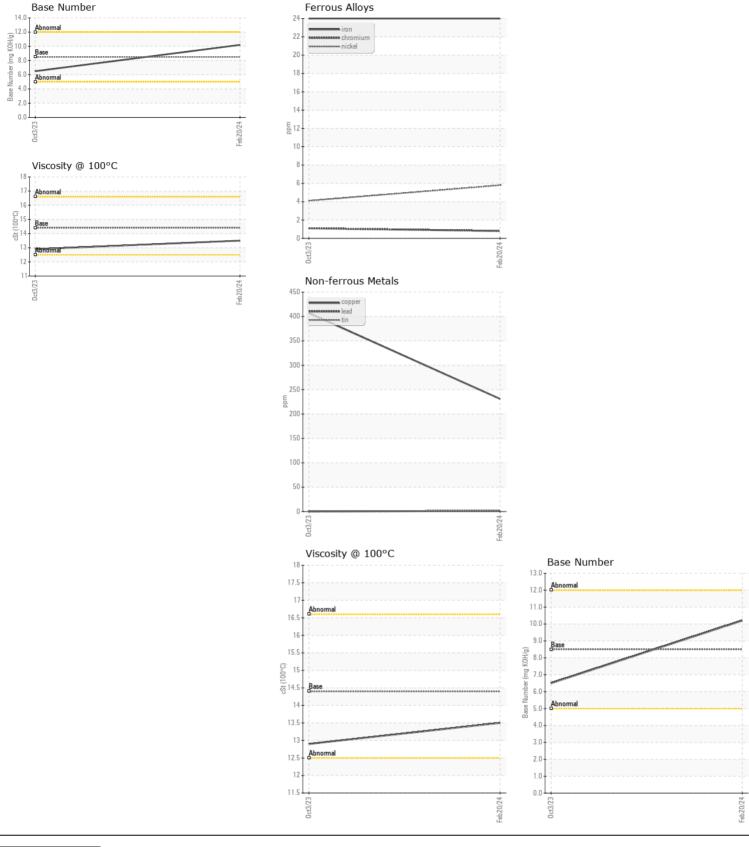
ASTM D445 14.4

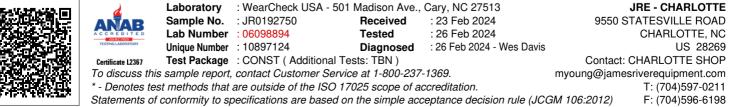
ppm ASTM D5185m 4250

Abs/.1mm *ASTM D7414 >25

ppm

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





Submitted By: Mike Young - CHARLOTTE SHOP