

Machine Id 46535 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		WC0936294	WC0869186	WC080599
	Sample Date		Client Info		16 May 2024	09 Nov 2023	28 Apr 202
	Machine Age	mls	Client Info		84803	0	0
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	N/A	N/A
	Filter Changed		Client Info		Changed	N/A	N/A
	Sample Status				NORMAL	NORMAL	MARGINA
WEAR	Iron	ppm	ASTM D5185m	>100	8	7	10
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>3	<1	0	0
	Aluminum	ppm	ASTM D5185m	>20	4	3	2
	Lead	ppm	ASTM D5185m	>40	<1	0	0
	Copper	ppm	ASTM D5185m	>330	1	<1	2
	Tin	ppm	ASTM D5185m	>15	1	<1	0
	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	7	4	5
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	4	4	6
	Fuel		WC Method	>5	<1.0	<1.0	2 .2
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	6.7	6.5	5.9
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	20.2	17.0
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	<1	<1	0
	Boron	ppm	ASTM D5185m	250	427	7	14
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	10	0	0	0
	Molybdenum	ppm	ASTM D5185m	100	110	59	62
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	420	893	944
	Calcium	ppm	ASTM D5185m	3000	1455	1023	1061
	Phosphorus	ppm	ASTM D5185m	1150	860	1001	1004
	Zinc	ppm	ASTM D5185m		1160	1200	1229
	Sulfur	ppm	ASTM D5185m	4250	3069	3070	3782
	Ouidation	Alas / day		05	100	474	110

Oxidation

Visc @ 100°C cSt

Abs/.1mm *ASTM D7414 >25

ASTM D445 14.4

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

17.4

8.8

12.4

14.2

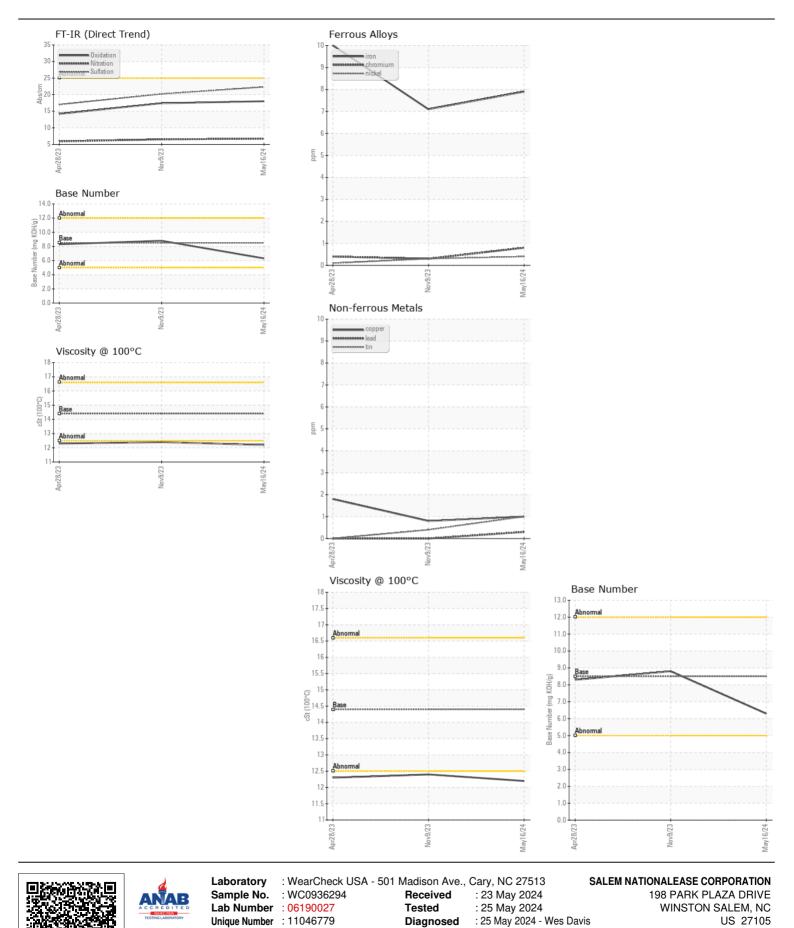
12.3

8.3

18.0

6.3

12.2



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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