

## Machine Id 611392 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		WC0903075	WC0717611	
	Sample Date		Client Info		13 Jun 2024	25 May 2023	
	Machine Age	mls	Client Info		60000	48655	
	Oil Age	mls	Client Info		60000	0	
	Filter Age	mls	Client Info		60000	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m		5	13	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>20	0	0	
	Nickel	ppm	ASTM D5185m	>4	0	0	
	Titanium	ppm	ASTM D5185m		1	0	
	Silver	ppm	ASTM D5185m		0	<1	
	Aluminum	ppm	ASTM D5185m	>20	4	12	
	Lead	ppm	ASTM D5185m		<1	2	
	Copper	ppm	ASTM D5185m	>330	4	250	
	Tin	ppm	ASTM D5185m	>15	<1	2	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	0''''''''''''''''''''''''''''''''''''''			05			
CONTAMINATION	Silicon	ppm	ASTM D5185m		4	6	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		6	27	
	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	0/	WC Method	0	NEG	NEG	
	Soot %	%	*ASTM D7844		0.2	0.4	
	Nitration	Abs/cm	*ASTM D7624		7.1	8.6	
	Sulfation	Abs/.1mm	*ASTM D7415		21.0	21.6	
	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	
	Emulsified Water	scalar		NORML	NORML	NORML	
		scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	1	3	
	Boron	ppm	ASTM D5185m		255	4	
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		0	0	
	Molybdenum	ppm	ASTM D5185m		78	62	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m	450	474	876	
	Calcium	ppm	ASTM D5185m		1389	1308	
	Phosphorus	ppm	ASTM D5185m		984	993	
	Zinc	ppm	ASTM D5185m		1202	1252	
	Sulfur	ppm	ASTM D5185m		3715	3349	
	O datation	AL / 4		05	447	10.0	

Oxidation

Visc @ 100°C cSt

Abs/.1mm \*ASTM D7414 >25

ASTM D445 14.4

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

16.8

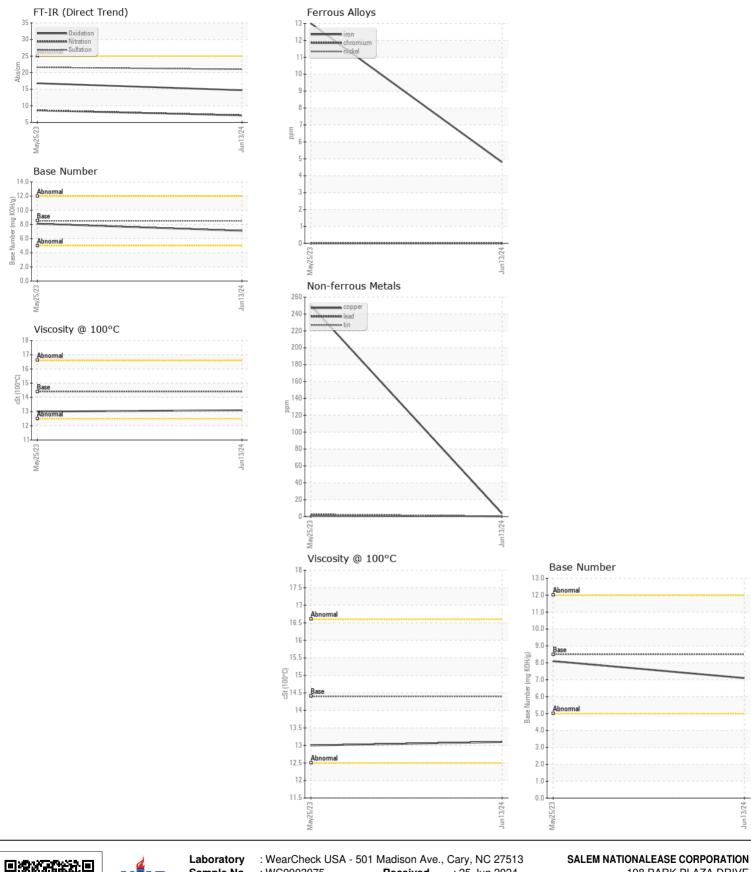
8.1

13.0

14.7

7.1

13.1



Sample No. Received : 25 Jun 2024 198 PARK PLAZA DRIVE : WC0903075 Lab Number : 06220530 Tested : 26 Jun 2024 WINSTON SALEM, NC Diagnosed Unique Number : 11098727 : 26 Jun 2024 - Wes Davis US 27105 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. T: (336)767-9642 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x:

Contact/Location: Audrey Hopkins - SALWIN Page 2 of 2