

Machine Id **17787** Component **Diesel Engine** Filuid **DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
December at the next context interval to receive Discourse (1.1)	Sample Number		Client Info		WC0867011	WC0866975	WC0798007
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the	Sample Date		Client Info		08 Apr 2024	18 Jan 2024	25 May 2023
brand, type, and viscosity of the oil on your next sample.	Machine Age	mls	Client Info		117919	111635	94486
brand, type, and viscosity of the off off your next sample.	Oil Age	mls	Client Info		6284	6618	8118
	Filter Age	mls	Client Info		6284	6618	8118
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
	lran			. 100	45	40	10
WEAR All component wear rates are normal.	Iron Chromium	ppm ppm	ASTM D5185m ASTM D5185m		15 1	18 0	13 <1
	Nickel	ppm	ASTM D5185m		1	0	0
	Titanium	ppm	ASTM D5185m	24	<1	0	0
	Silver	ppm	ASTM D5185m	-3	<1	0	0
	Aluminum	ppm	ASTM D5185m		4	2	<1
	Lead	ppm	ASTM D5185m		2	1	<1
	Copper	ppm	ASTM D5185m		8	26	1
	Tin	ppm	ASTM D5185m		2	<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
		304141	Visual	NONE		NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	7	5	4
	Potassium	ppm	ASTM D5185m	>20	3	<1	1
There is no indication of any contamination in the oil.	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	0.5	0.6	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.6	8.7
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	21.8	20.2
	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	3	2	<1
	Boron	ppm	ASTM D5185m		418	323	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		10	<1	0	0
	Molybdenum	ppm	ASTM D5185m		97	101	64
	Manganese	ppm	ASTM D5185m		1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	431	507	909
	Calcium	ppm	ASTM D5185m		1463	1457	1126
	Phosphorus	ppm	ASTM D5185m		1149	1046	1061
	Zinc	ppm	ASTM D5185m		1274	1264	1274
	Sulfur	ppm	ASTM D5185m	4250	3835	3337	3549
	Ovidation	Abo/ 1mm	*ACTM D7/1/	. OE	15.6	15 5	15 4

Oxidation

Visc @ 100°C cSt

15.5

7.7

12.8

15.4

13.0

10.2

15.6

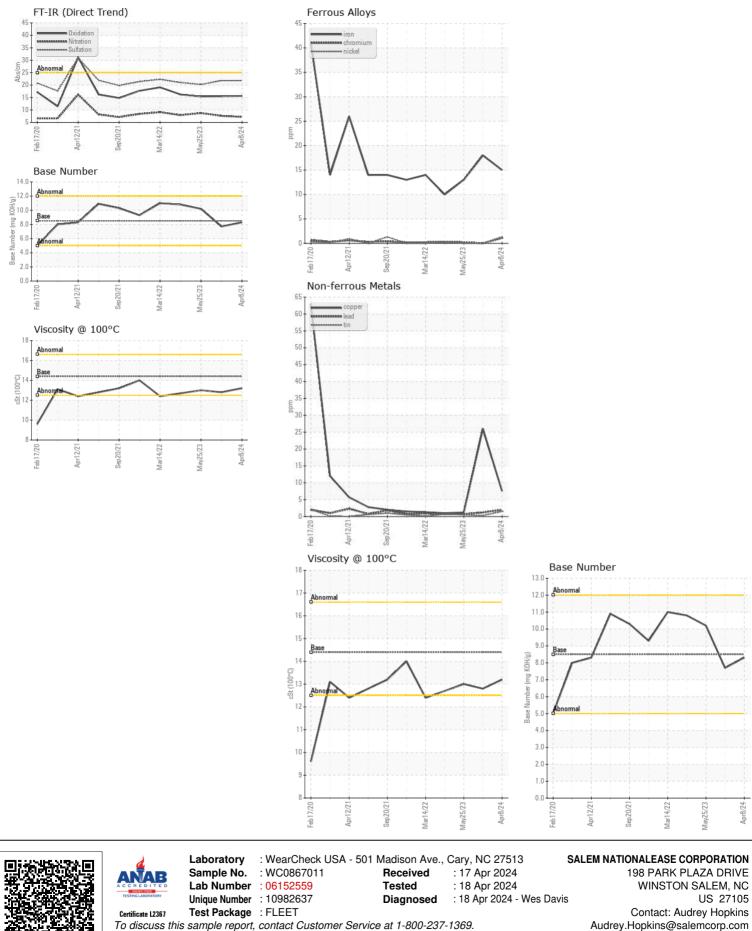
8.3

13.2

Abs/.1mm *ASTM D7414 >25

ASTM D445 14.4

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



To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)

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

T: (336)767-9642

F: x: