

WEARNORMALCONTAMINATIONNORMALFLUID CONDITIONNORMAL

Machine Id **17783** Component **Diesel Engine** Fluid **MOBIL 15W40 (--- QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the	Sample Number		Client Info		WC0904479	WC0790068	WC0790130
component make and model with your next sample.	Sample Date		Client Info		06 May 2024	31 Jul 2023	18 Feb 2023
	Machine Age	mls	Client Info		0	45169	0
	Oil Age	mls	Client Info		15000	20000	0
	Filter Age	mls	Client Info		15000	20000	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	57	38	48
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>4	0	0	0
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>3	0	0	2
	Aluminum	ppm	ASTM D5185m	>20	4	3	4
	Lead	ppm	ASTM D5185m	>40	<1	<1	5
	Copper	ppm	ASTM D5185m	>330	2	2	21
	Tin	ppm	ASTM D5185m	>15	1	<1	1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8	5	6
	Potassium	ppm	ASTM D5185m	>20	0	<1	2
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method		<1.0	<1.0	6.9
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	1.2	0.5	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	10.3	8.3	5.4
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3	19.5	37.0
	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	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	2	<1	6
	Boron	ppm	ASTM D5185m		227	2	57
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	0
	Molybdenum	ppm	ASTM D5185m		83	66	11
	Manganese	ppm	ASTM D5185m		<1	<1	4
	Magnesium	ppm	ASTM D5185m		552	931	150
	Calcium	ppm	ASTM D5185m		1361	1080	226
	Phosphorus	ppm	ASTM D5185m		1124	1048	345
	Zinc	ppm	ASTM D5185m		1311	1263	193
	Sulfur	ppm	ASTM D5185m		3690	3970	1393
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	15.6	46.3
	Data Marchan (DM)			~	10.1	10.0	

Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

Visc @ 100°C cSt

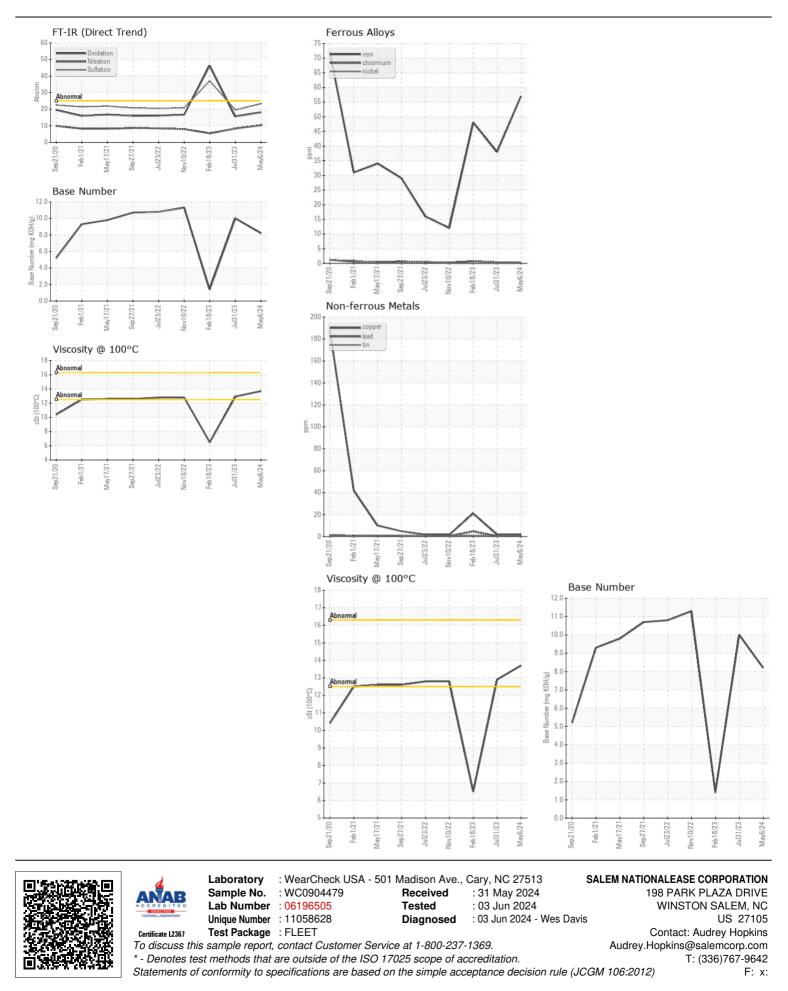
12.9

10.0 🔺 1.4

6.5

8.2

13.7



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