

Machine Id **FREIGHTLINER 58440** Component Diesel Engine

MOBIL 15W40 (44 QTS)

MOBIL 15W40 (44 Q15)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0912488	WC0840880	WC0717932
	Sample Date		Client Info		12 Apr 2024	26 Jul 2023	27 Jan 2023
	Machine Age	mls	Client Info		285292	227453	213100
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	N/A	Changed
	Filter Changed		Client Info		Changed	N/A	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>90	18	12	18
All component wear rates are normal	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>2	0	0	0
	Titanium	ppm	ASTM D5185m	>2	0	<1	0
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	3	1	5
	Lead	ppm	ASTM D5185m	>40	7	1	4
	Copper	ppm	ASTM D5185m	>330	1	<1	<1
	Tin	ppm	ASTM D5185m	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	4	4
There is a fadientian of an extension time in the off	Potassium	ppm	ASTM D5185m	>20	5	2	11
There is no indication of any contamination in the oil.	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>6	0.5	0.2	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	9.6	7.6	9.3
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	20.0	20.8
	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	4	2	1
	Boron	ppm	ASTM D5185m		27	2	5
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		72	66	72
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		939	1045	1001
	Calcium	ppm	ASTM D5185m		1222	1146	1198
	Phosphorus	ppm	ASTM D5185m		1155	1083	1065
	Zinc	ppm	ASTM D5185m		1370	1287	1291
	Sulfur	ppm	ASTM D5185m		3729	3919	3763
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	15.9	16.3
	Base Number (BN)	mg KOH/g	ASTM D2896		7.7	9.6	8.6
	Vies 0 10000	- 01	AOTA DATE			10.0	10.0

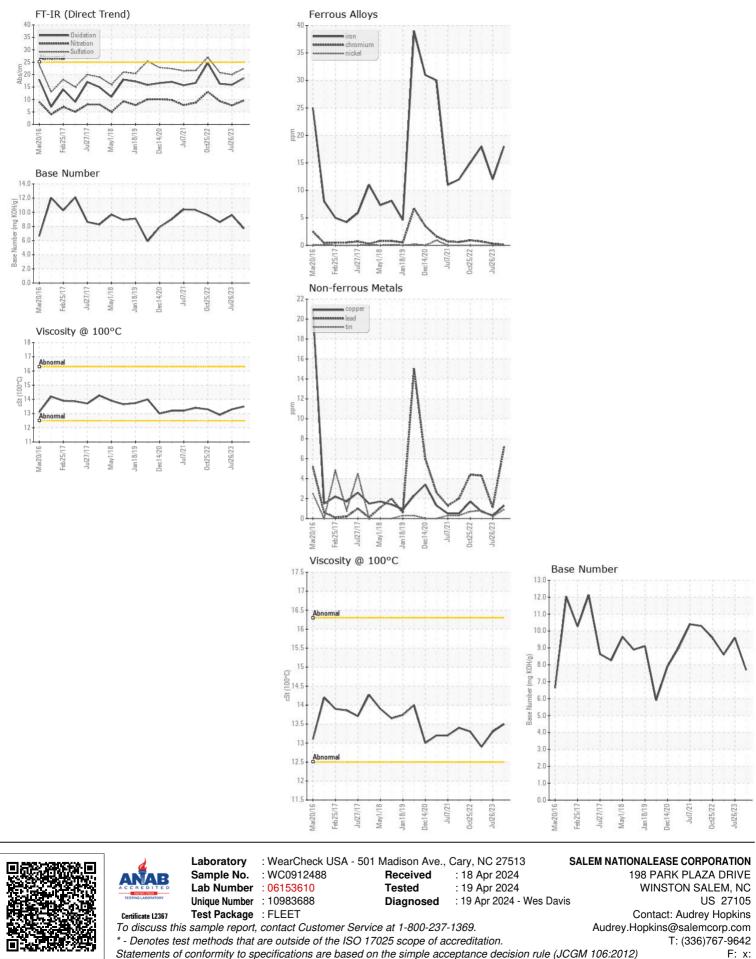
13.3

12.9

13.5

ASTM D445

Visc @ 100°C cSt



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