

Machine Id **FREIGHTLINER 36171** omponer **Diesel Engine**

CHEVRON 15W40 (48 QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0918502	WC0819491	WC0745110
	Sample Date		Client Info		17 Apr 2024	25 May 2023	30 Sep 2022
	Machine Age	mls	Client Info		307056	290022	270873
	Oil Age	mls	Client Info		17034	6233	8265
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				NORMAL	NORMAL	ATTENTION
WEAR	Iron	ppm	ASTM D5185m	>80	22	13	11
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>5	1	<1	<1
	Nickel	ppm	ASTM D5185m	>2	<1	0	<1
	Titanium	ppm	ASTM D5185m		<1	0	<1
	Silver	ppm	ASTM D5185m	>3	0	0	8
	Aluminum	ppm	ASTM D5185m	>30	13	7	4
	Lead	ppm	ASTM D5185m		<1	0	1
	Copper	ppm	ASTM D5185m		17	13	14
	Tin	ppm	ASTM D5185m		2	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	<u>~20</u>	11	4	7
CONTAMINATION	Potassium	ppm	ASTM D5185m		4	2	2
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	0.3
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	13	0.7	0.6	0.6
	Nitration	Abs/cm	*ASTM D7644		8.7	8.3	8.8
	Sulfation	Abs/.1mm	*ASTM D7024		20.6	20.1	20.6
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
		scalar	*Visual	NORML	NORML	NORML	NORM
	Appearance Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water		*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	0			50			
	Sodium	ppm	ASTM D5185m	>50	<1	0	1
	Boron	ppm	ASTM D5185m		15	4	4
	Barium	ppm	ASTM D5185m		0	2	0
	Molybdenum	ppm	ASTM D5185m		70	65	69
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		932	820	688
	Calcium	ppm	ASTM D5185m		1146	1062	1104
	Phosphorus	ppm	ASTM D5185m		1067	912	839
	Zinc	ppm	ASTM D5185m		1236	1114	1041
	Sulfur	ppm	ASTM D5185m		3323	2849	2680
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	14.9	13.2
	Base Number (BN)	mg KOH/g	ASTM D2896		8.2	8.3	7.5
		<u> </u>	AOTHORICE			107	<u> </u>

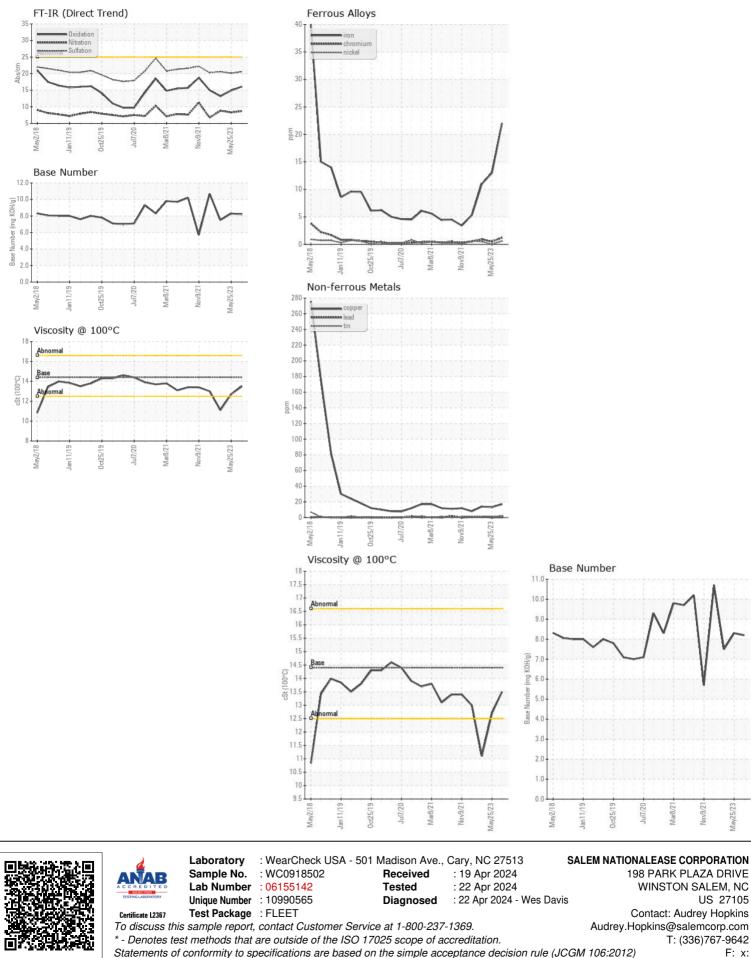
Visc @ 100°C cSt

ASTM D445 14.4

12.7

11.1

13.5



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