WEAR CONTAMINATION **FLUID CONDITION**

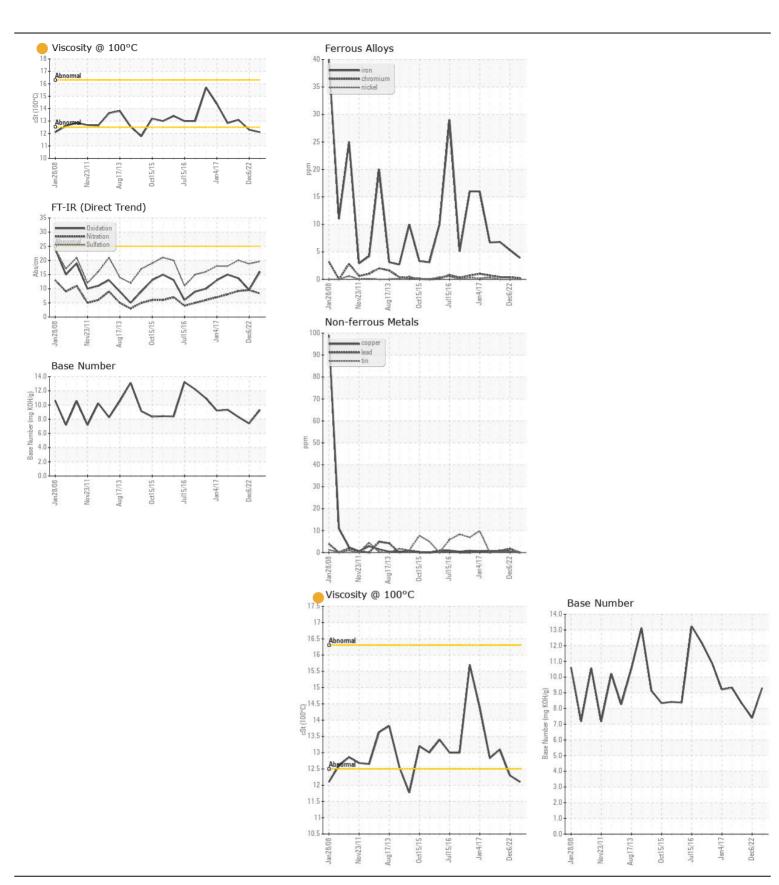
NORMAL NORMAL ATTENTION

Machine Id

FREIGHTLINER 818

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0929237	WC0742444	WC055238
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		23 May 2024	06 Dec 2022	09 Jul 202
	Machine Age	mls	Client Info		35182	29148	20117
	Oil Age	mls	Client Info		0	5000	0
	Filter Age	mls	Client Info		0	5000	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ATTENTION	ATTENTION	NORMAL
A/E A B	lua-a		ACTM DE105	100			7
WEAR	Iron	ppm	ASTM D5185m		4	5	7
All component wear rates are normal.	Chromium Nickel	ppm	ASTM D5185m		<1	<1	<1
	Titanium	ppm	ASTM D5185m ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m		0	0	<1
	Aluminum	ppm	ASTM D5185m			2	<1
	Lead	ppm	ASTM D5185m		0	2	<1
	Copper	ppm ppm	ASTM D5185m		0	<1	<1
	Tin	ppm	ASTM D5185m		0	<1	<1
	Vanadium	ppm	ASTM D5185m	>10	0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	3	2	3
Fuel content negligible. There is no indication of any contemination in	Potassium	ppm	ASTM D5185m	>20	<1	0	2
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel		WC Method		<1.0	0.5	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.9	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	8.3	9.5	9.2
	Sulfation	Abs/.1mm	*ASTM D7415		19.6	18.8	20
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	2	1	<1
	Boron	ppm	ASTM D5185m		34	6	22
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		65	63	12
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		913	914	84
	Calcium	ppm	ASTM D5185m		1143	1100	2282
	Phosphorus	ppm	ASTM D5185m		1047	1067	924
	Zinc	ppm	ASTM D5185m		1211	1224	1087
	Sulfur	ppm	ASTM D5185m		3705	3793	3081
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	9.6	13.7
	Base Number (BN)	mg KOH/g	ASTM D2896		9.3	7.4	8.3
	Visc @ 100°C	cSt	ASTM D445		12.1	12.3	13.1







Certificate L2367

Report Id: SALWIN [WUSCAR] 06229475 (Generated: 07/10/2024 09:05:17) Rev: 1

Laboratory Sample No.

: WC0929237 Lab Number : 06229475 Unique Number : 11112968 Test Package : FLEET

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 05 Jul 2024 **Tested** : 10 Jul 2024

Diagnosed : 10 Jul 2024 - Angela Borella

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE WINSTON SALEM, NC

US 27105 Contact: Audrey Hopkins

Audrey.Hopkins@salemcorp.com T: (336)767-9642

* - 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)

F: x: