



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
FREIGHTLINER 13078
Component
Diesel Engine
Fluid
MOBIL 15W40 (20 QTS)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0842014	WC0841791	WC0841936
Sample Date		Client Info		06 Jan 2024	25 Nov 2023	09 Oct 2023
Machine Age	mls	Client Info		308298	299705	290036
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>130	17	18	16
Chromium	ppm	ASTM D5185m	>10	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	3
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>125	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

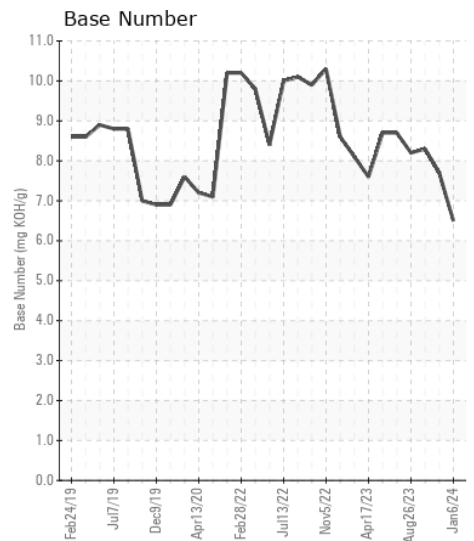
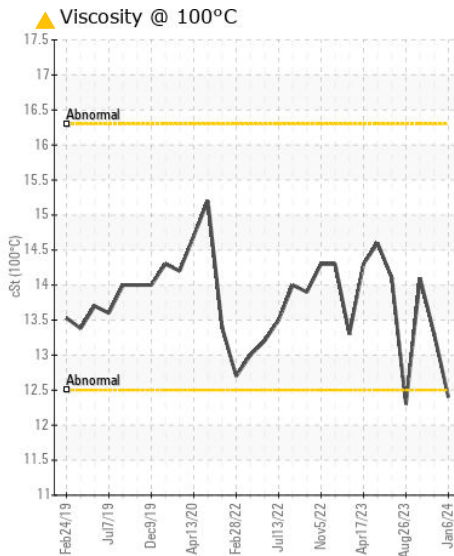
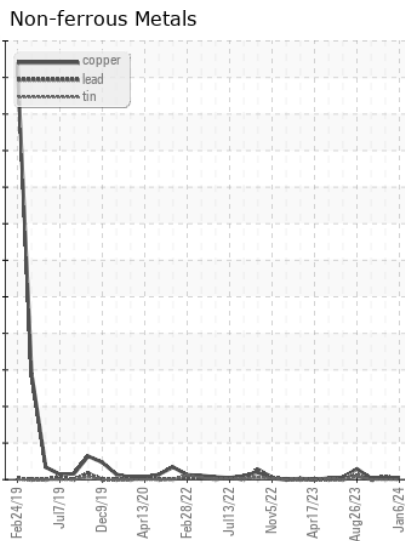
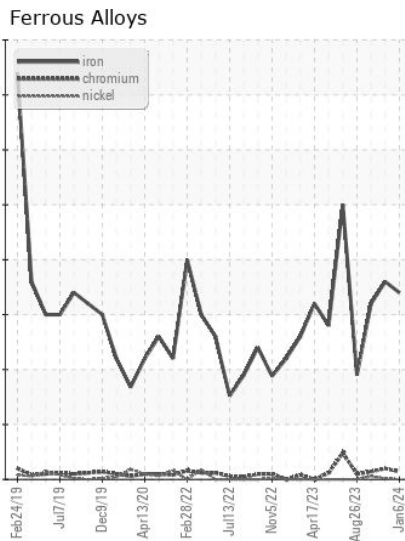
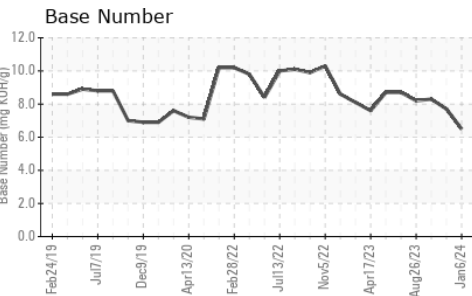
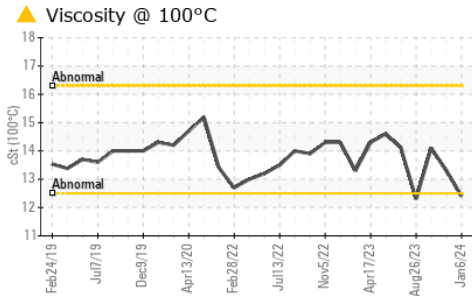
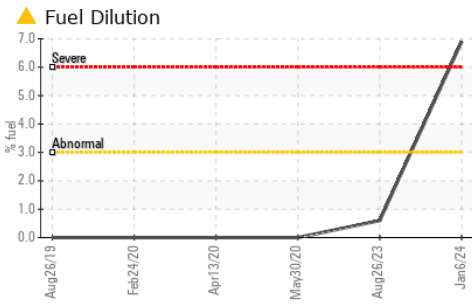
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	5	5	5
Potassium	ppm	ASTM D5185m	>20	0	<1	3
Fuel	%	ASTM D3524	>3.0	▲ 6.9	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.3	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	11.8	12.3	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.5	25.9	24.0
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

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>118	2	<1	<1
Boron	ppm	ASTM D5185m		223	76	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		81	77	77
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		594	1008	1119
Calcium	ppm	ASTM D5185m		1303	1231	1271
Phosphorus	ppm	ASTM D5185m		1026	979	1096
Zinc	ppm	ASTM D5185m		1225	1410	1442
Sulfur	ppm	ASTM D5185m		2849	3217	3579
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.2	26.0	22.8
Base Number (BN)	mg KOH/g	ASTM D2896		6.5	7.7	8.3
Visc @ 100°C	cSt	ASTM D445		▲ 12.4	13.3	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0842014
Lab Number : 06099638
Unique Number : 10897868
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

SALEM NATIONALEASE CORPORATION
 198 PARK PLAZA DRIVE
 WINSTON SALEM, NC
 US 27105
 Contact: Audrey Hopkins
 Audrey.Hopkins@salemcorp.com
 T: (336)767-9642
 F: x:

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)