FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
{UNASSIGNED}
Machine Id
814031 MACK LR64R
Component
Diesel Engine
Fluid
TIER ONE 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

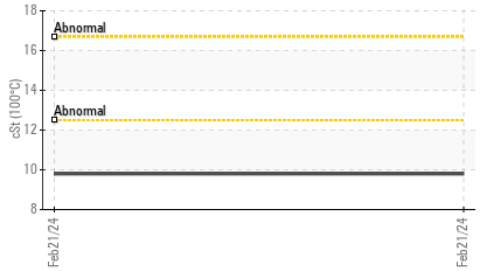
Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

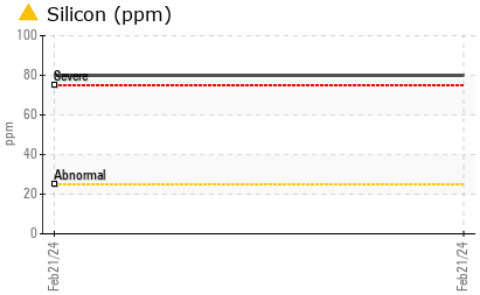
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102218	---	---
Sample Date		Client Info		21 Feb 2024	---	---
Machine Age	hrs	Client Info		269	---	---
Oil Age	hrs	Client Info		269	---	---
Filter Age	hrs	Client Info		269	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>120	27	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>5	7	---	---
Titanium	ppm	ASTM D5185m	>2	<1	---	---
Silver	ppm	ASTM D5185m	>2	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	6	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	49	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	▲ 80	---	---
Potassium	ppm	ASTM D5185m	>20	6	---	---
Fuel	%	ASTM D3524	>3.0	0.4	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>4	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	7.6	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.4	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m		305	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		110	---	---
Manganese	ppm	ASTM D5185m		4	---	---
Magnesium	ppm	ASTM D5185m		709	---	---
Calcium	ppm	ASTM D5185m		1456	---	---
Phosphorus	ppm	ASTM D5185m		653	---	---
Zinc	ppm	ASTM D5185m		816	---	---
Sulfur	ppm	ASTM D5185m		2439	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.3	---	---
Visc @ 100°C	cSt	ASTM D445		▲ 9.8	---	---

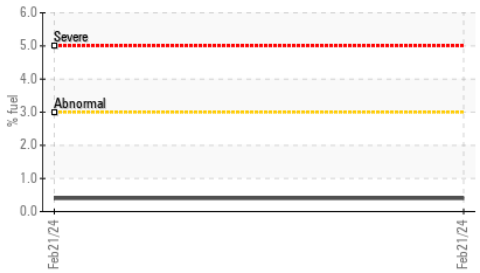
Viscosity @ 100°C



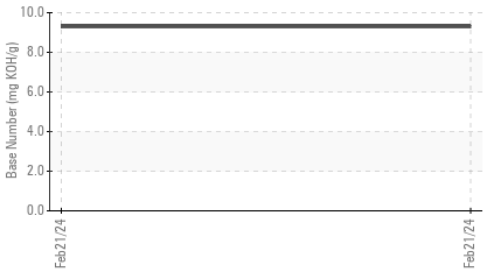
Silicon (ppm)



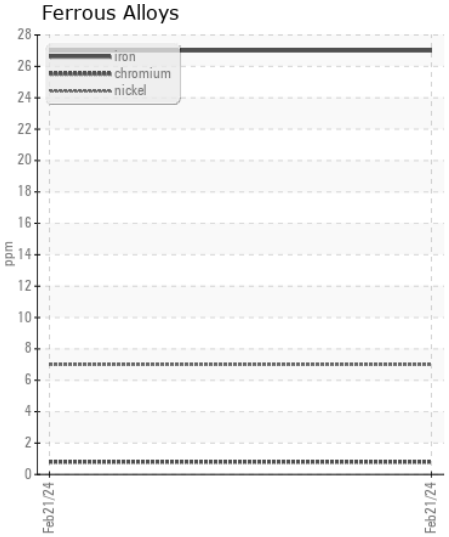
Fuel Dilution



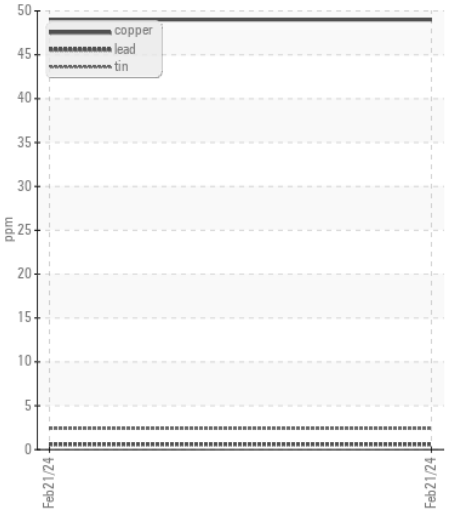
Base Number



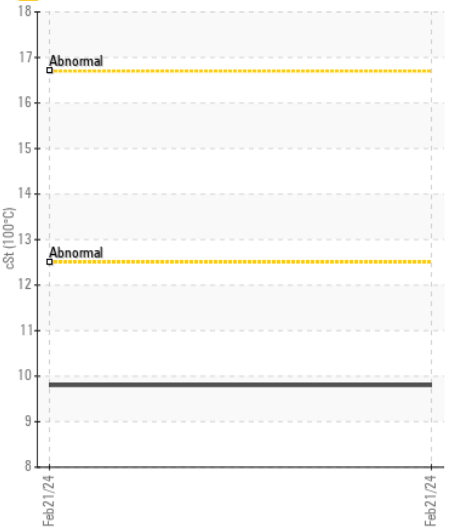
Ferrous Alloys



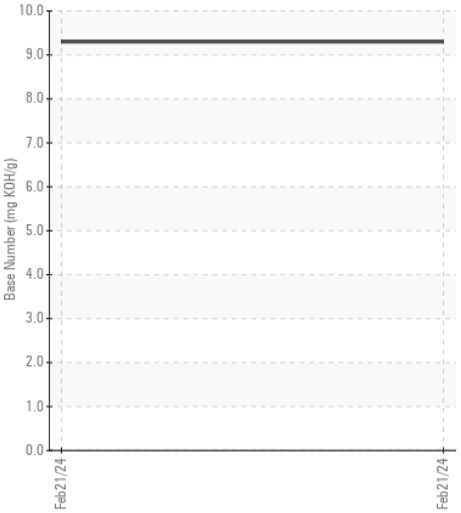
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0102218
Lab Number : 06098972
Unique Number : 10897202
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 23 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Sean Felton

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)

GFL Environmental - 642- Grand Rapids Hauling
5826 Alden Nash Ave SE
Lowell, MI
US 49331
Contact: Josh Vanvolkinburg
jvanvolkinburg@gflenv.com
T:
F:

Report Id: GFL642 [WUSCAR] 06098972 (Generated: 02/27/2024 10:53:09) Rev: 1

Submitted By: BRITTANY FLINN