FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
920124 PETERBILT 320
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

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.

CONTAMINATION

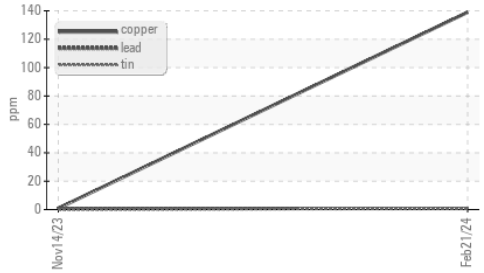
There is no indication of any contamination in the oil.

FLUID CONDITION

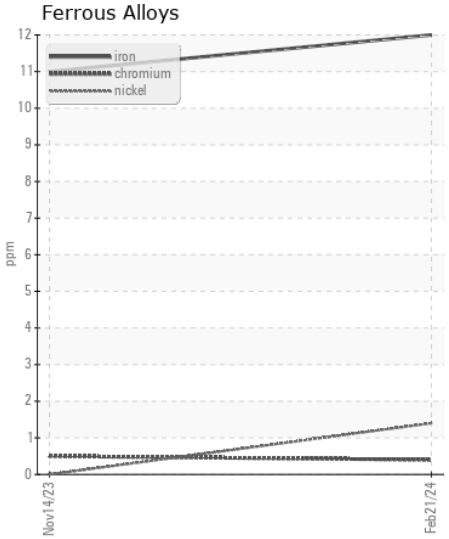
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0061423	GFL0061437	---
Sample Date		Client Info		21 Feb 2024	14 Nov 2023	---
Machine Age	hrs	Client Info		30048	29426	---
Oil Age	hrs	Client Info		624	600	---
Filter Age	hrs	Client Info		624	600	---
Oil Changed		Client Info		Not Changd	Changed	---
Filter Changed		Client Info		Not Changd	Changed	---
Sample Status				ABNORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>110	12	11	---
Chromium	ppm	ASTM D5185m	>4	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	1	1	---
Lead	ppm	ASTM D5185m	>45	<1	<1	---
Copper	ppm	ASTM D5185m	>85	▲ 139	<1	---
Tin	ppm	ASTM D5185m	>4	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>30	5	4	---
Potassium	ppm	ASTM D5185m	>20	0	3	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	1.1	---
Nitration	Abs/cm	*ASTM D7624	>20	7.9	6.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	20.0	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m		3	<1	---
Boron	ppm	ASTM D5185m		11	5	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		56	55	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		805	835	---
Calcium	ppm	ASTM D5185m		1051	1024	---
Phosphorus	ppm	ASTM D5185m		905	918	---
Zinc	ppm	ASTM D5185m		971	1156	---
Sulfur	ppm	ASTM D5185m		2589	3317	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	13.5	---
Base Number (BN)	mg KOH/g	ASTM D2896		7.7	8.9	---
Visc @ 100°C	cSt	ASTM D445		12.8	13.2	---

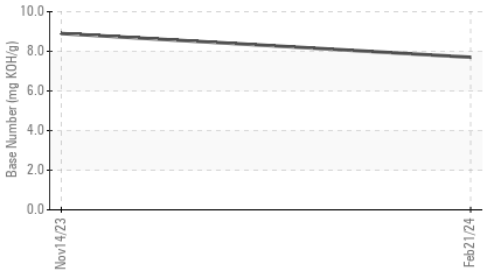
Non-ferrous Metals



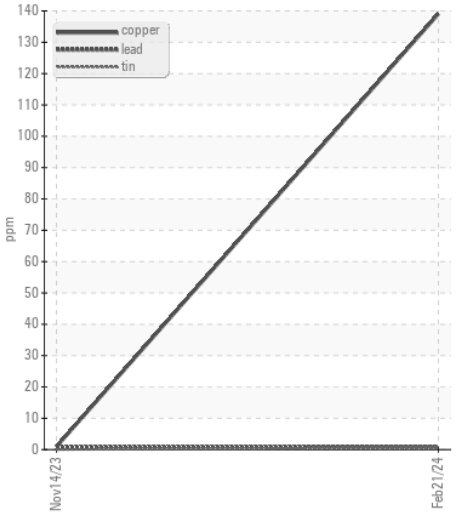
Ferrous Alloys



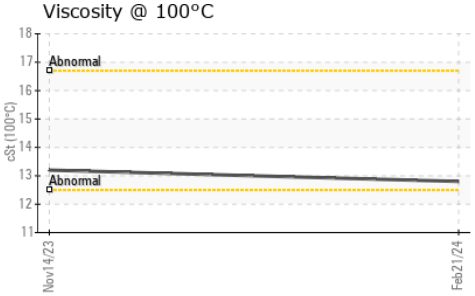
Base Number



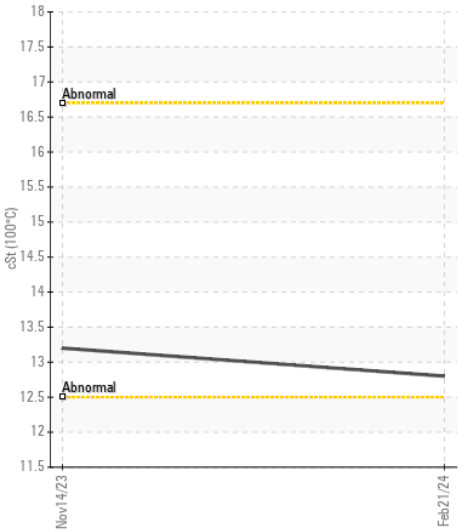
Non-ferrous Metals



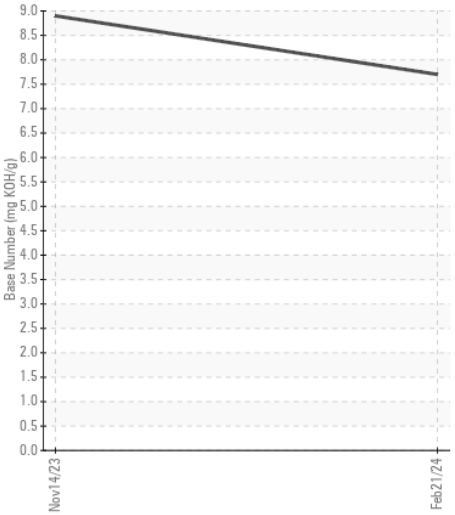
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0061423
Lab Number : 06098262
Unique Number : 10896492
Test Package : FLEET

Received : 23 Feb 2024
Tested : 26 Feb 2024
Diagnosed : 26 Feb 2024 - Don Baldridge

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 Arnett
joshuaarnett@gflenv.com
T:
F:

Report Id: GFL642 [WUSCAR] 06098262 (Generated: 02/26/2024 12:05:13) Rev: 1

Submitted By: BRITTANY FLINN