FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
825073 PETERBILT 320
Component
Diesel Engine
Fluid
TIER ONE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

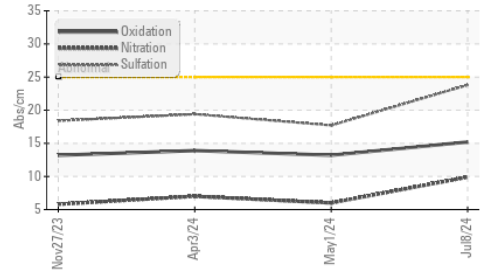
There is no indication of any contamination in the oil.

FLUID CONDITION

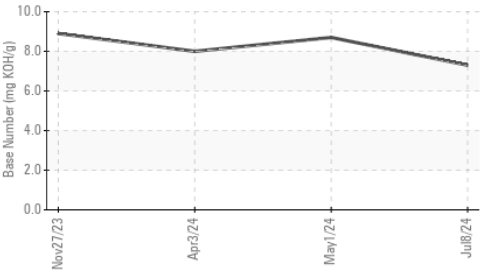
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0115232	GFL0115242	GFL0102228
Sample Date		Client Info		08 Jul 2024	01 May 2024	03 Apr 2024
Machine Age	hrs	Client Info		21544	21190	20985
Oil Age	hrs	Client Info		77	0	13
Filter Age	hrs	Client Info		77	0	13
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>110	51	4	13
Chromium	ppm	ASTM D5185m	>4	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		<1	1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	<1	2	<1
Lead	ppm	ASTM D5185m	>45	8	3	0
Copper	ppm	ASTM D5185m	>85	1	<1	0
Tin	ppm	ASTM D5185m	>4	0	2	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>30	4	3	3
Potassium	ppm	ASTM D5185m	>20	<1	4	0
Fuel		WC Method	>5	<1.0	<1.0	1.7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2.6	0.2	0.8
Nitration	Abs/cm	*ASTM D7624	>20	9.9	6.0	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	17.7	19.4
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
Sodium	ppm	ASTM D5185m		5	1	1
Boron	ppm	ASTM D5185m		6	7	13
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		54	51	51
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		815	980	822
Calcium	ppm	ASTM D5185m		1155	1182	1076
Phosphorus	ppm	ASTM D5185m		986	1162	979
Zinc	ppm	ASTM D5185m		1154	1374	1115
Sulfur	ppm	ASTM D5185m		3134	4351	3559
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	13.2	13.9
Base Number (BN)	mg KOH/g	ASTM D2896		7.3	8.7	8.0
Visc @ 100°C	cSt	ASTM D445		12.9	12.9	12.2

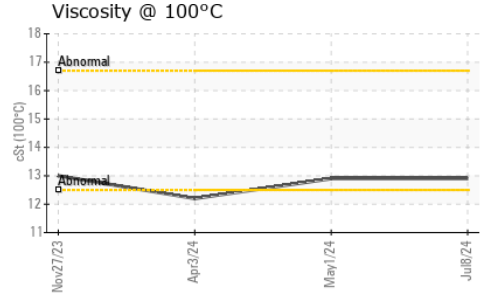
FT-IR (Direct Trend)



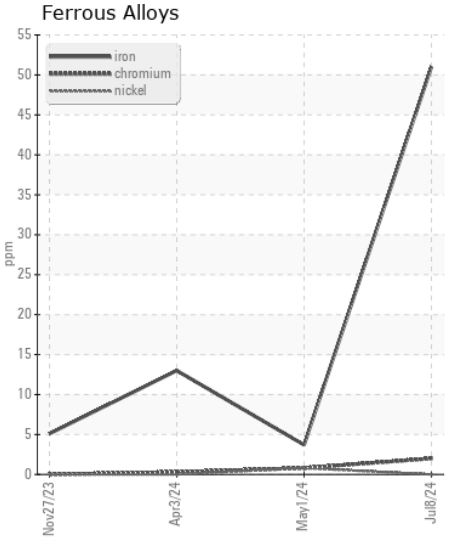
Base Number



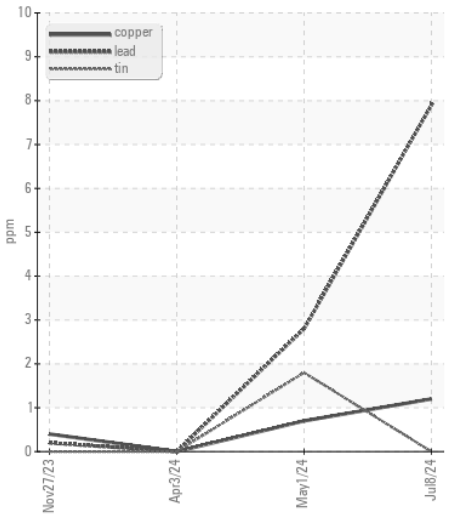
Viscosity @ 100°C



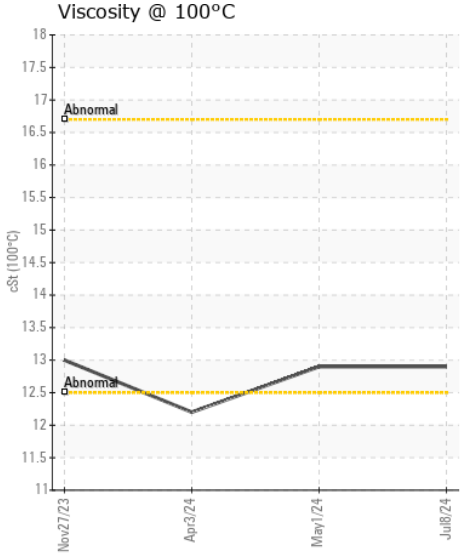
Ferrous Alloys



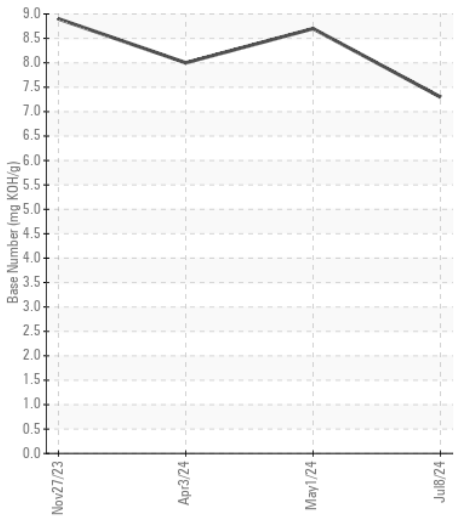
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0115232
Lab Number : 06234293
Unique Number : 11123127
Test Package : FLEET

Received : 11 Jul 2024
Tested : 12 Jul 2024
Diagnosed : 14 Jul 2024 - Wes Davis

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] 06234293 (Generated: 07/14/2024 12:07:36) Rev: 1

Submitted By: See also GFL642B - Jessica Shearer