FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(BD33439)
Machine Id
413097 MACK GR64BR
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

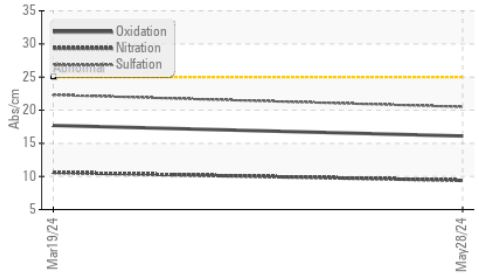
There is no indication of any contamination in the oil.

FLUID CONDITION

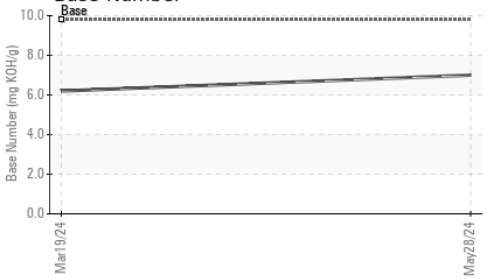
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0110973	GFL0110988	---
Sample Date		Client Info		28 May 2024	19 Mar 2024	---
Machine Age	hrs	Client Info		2963	2636	---
Oil Age	hrs	Client Info		123	44	---
Filter Age	hrs	Client Info		123	44	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185m	>120	8	19	---
Chromium	ppm	ASTM D5185m	>20	0	1	---
Nickel	ppm	ASTM D5185m	>5	3	▲ 11	---
Titanium	ppm	ASTM D5185m	>2	88	92	---
Silver	ppm	ASTM D5185m	>2	<1	<1	---
Aluminum	ppm	ASTM D5185m	>20	2	5	---
Lead	ppm	ASTM D5185m	>40	0	1	---
Copper	ppm	ASTM D5185m	>330	2	10	---
Tin	ppm	ASTM D5185m	>15	<1	2	---
Vanadium	ppm	ASTM D5185m		<1	1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	5	8	---
Potassium	ppm	ASTM D5185m	>20	6	16	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>4	0.2	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	9.4	10.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	22.3	---
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		2	1	---
Boron	ppm	ASTM D5185m	0	109	81	---
Barium	ppm	ASTM D5185m	0	0	2	---
Molybdenum	ppm	ASTM D5185m	60	1	7	---
Manganese	ppm	ASTM D5185m	0	<1	2	---
Magnesium	ppm	ASTM D5185m	1010	429	423	---
Calcium	ppm	ASTM D5185m	1070	1708	1746	---
Phosphorus	ppm	ASTM D5185m	1150	1034	1007	---
Zinc	ppm	ASTM D5185m	1270	1208	1180	---
Sulfur	ppm	ASTM D5185m	2060	4263	3739	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	17.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.0	6.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.2	---

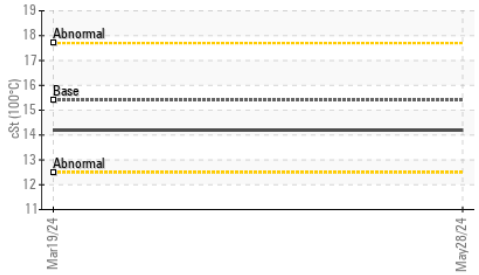
FT-IR (Direct Trend)



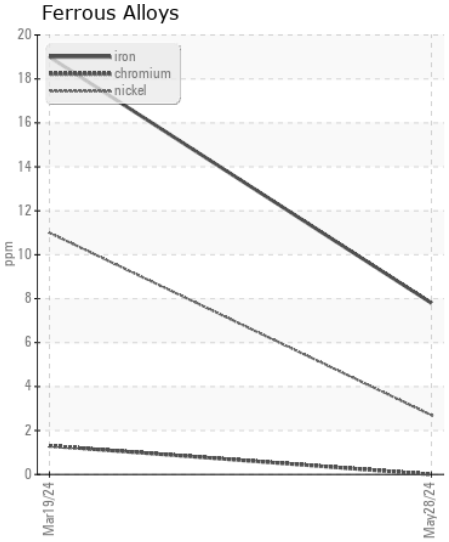
Base Number



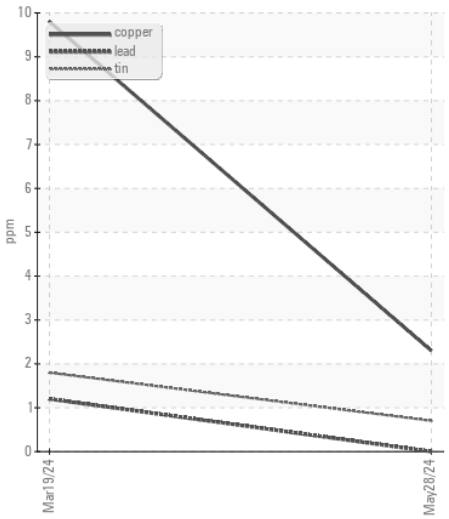
Viscosity @ 100°C



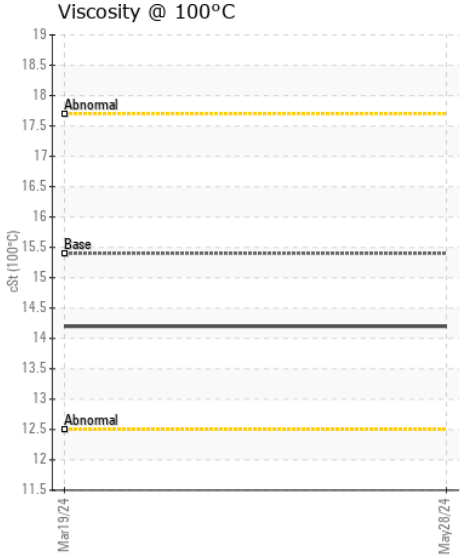
Ferrous Alloys



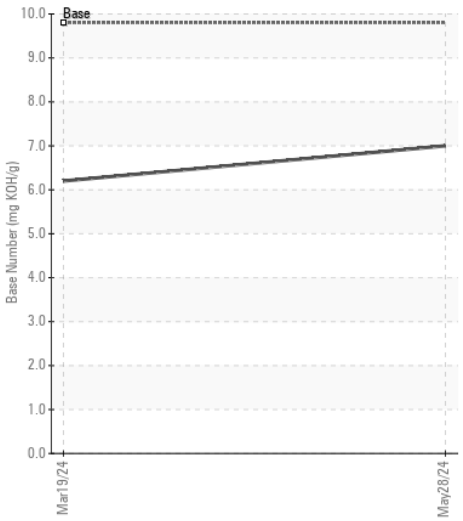
Non-ferrous Metals



Viscosity @ 100°C



Base Number



ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: GFL0110973	**Received**	: 31 May 2024
Lab Number	: 06196477	**Tested**	: 03 Jun 2024
Unique Number	: 11058600	**Diagnosed**	: 03 Jun 2024 - Don Baldridge
Test Package	: FLEET		

GFL Environmental - 642B- MCM Disposal
10450 Pease Ave
Byron Center, MI
US 49315
Contact: Joshua VanVolkinburg

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)

T:
F: