FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
TALLASSEE
Machine Id
913044
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

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

WEAR

Exhaust valve wear is indicated.

CONTAMINATION

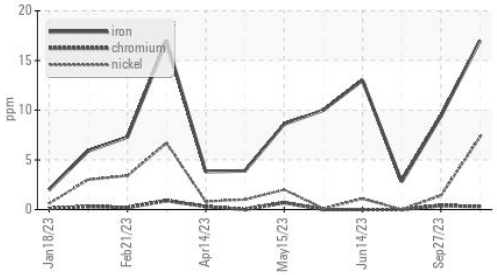
There is no indication of any contamination in the oil.

FLUID CONDITION

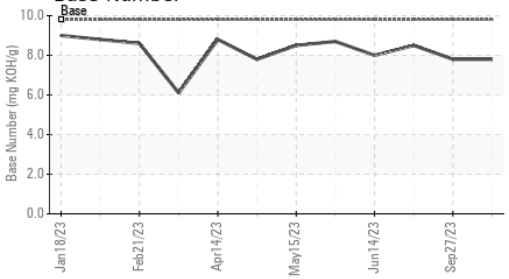
The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0079717**	GFL0079698	GFL0086020
Sample Date		Client Info		**20 Dec 2023**	27 Sep 2023	22 Aug 2023
Machine Age	hrs	Client Info		**32158**	3000	2734
Oil Age	hrs	Client Info		**29878**	720	334
Filter Age	hrs	Client Info		**0**	0	334
Oil Changed		Client Info		**N/A**	N/A	N/A
Filter Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>120	**17**	9	3
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	0
Nickel	ppm	ASTM D5185m	>5	▲ **7**	1	0
Titanium	ppm	ASTM D5185m	>2	**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	<1	0
Aluminum	ppm	ASTM D5185m	>20	**2**	3	0
Lead	ppm	ASTM D5185m	>40	**0**	1	<1
Copper	ppm	ASTM D5185m	>330	**6**	3	0
Tin	ppm	ASTM D5185m	>15	**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	>25	**6**	7	6
Potassium	ppm	ASTM D5185m	>20	**6**	5	3
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>4	**0.6**	0.6	0.2
Nitration	Abs/cm	*ASTM D7624	>20	**8.0**	7.9	5.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	**19.6**	19.8	17.5
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		**2**	3	2
Boron	ppm	ASTM D5185m	0	**6**	18	47
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**62**	61	60
Manganese	ppm	ASTM D5185m	0	**0**	<1	0
Magnesium	ppm	ASTM D5185m	1010	**966**	903	970
Calcium	ppm	ASTM D5185m	1070	**1094**	1102	1215
Phosphorus	ppm	ASTM D5185m	1150	**1016**	972	984
Zinc	ppm	ASTM D5185m	1270	**1221**	1194	1249
Sulfur	ppm	ASTM D5185m	2060	**3257**	2867	3822
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.1**	15.1	12.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**7.8**	7.8	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	**13.7**	13.4	13.8

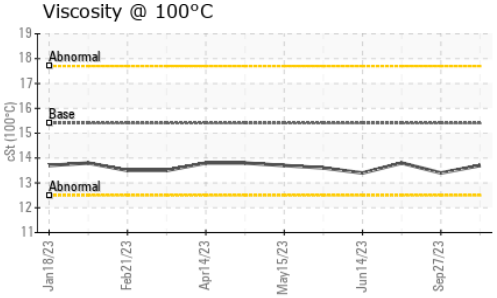
Ferrous Alloys



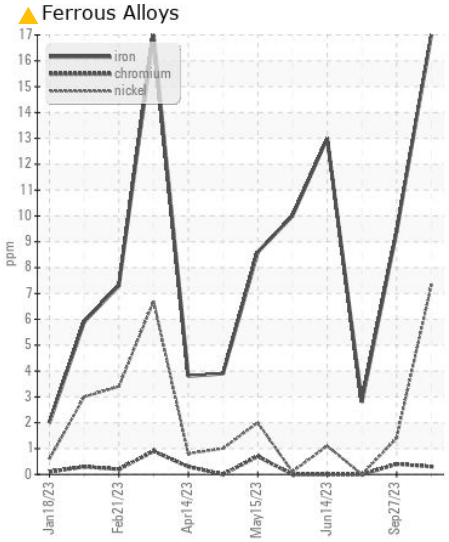
Base Number



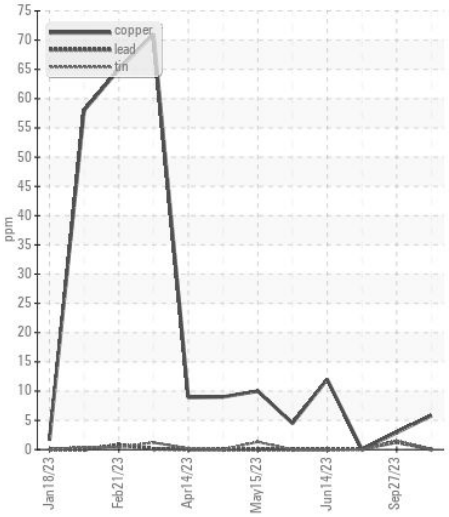
Viscosity @ 100°C



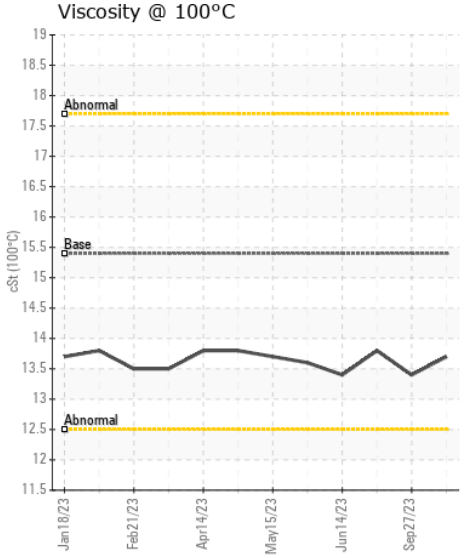
Ferrous Alloys



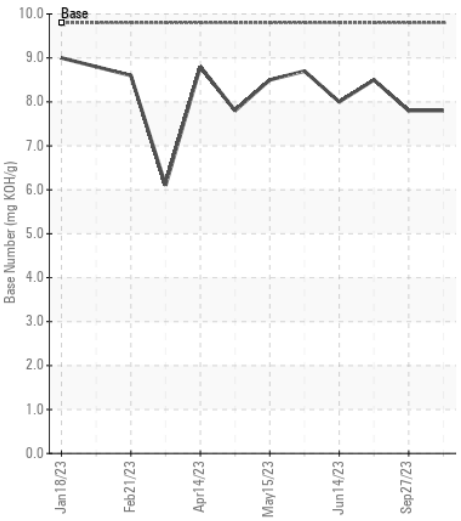
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079717
Lab Number : 06057295
Unique Number : 10823244
Test Package : FLEET

Recieved : 10 Jan 2024
Diagnosed : 12 Jan 2024
Diagnostician : 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 - 172 - Montgomery-Alexander City-Tallahassee
Multiple Sites
Montgomery, AL
US 36108
Contact: BRANDON HURST
brandonhurst@gflenv.com
T:
F:

Report Id: GFL172 [WUSCAR] 06057295 (Generated: 01/12/2024 14:00:26) Rev: 1

Submitted By: Lisa Reeves