FLEET LUBE 360™ OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
924034-260283
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

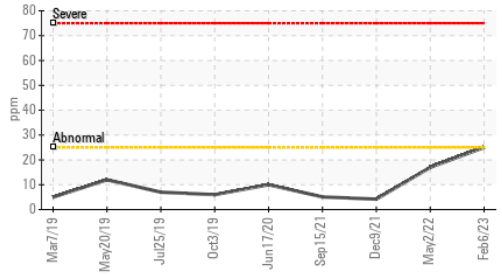
Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

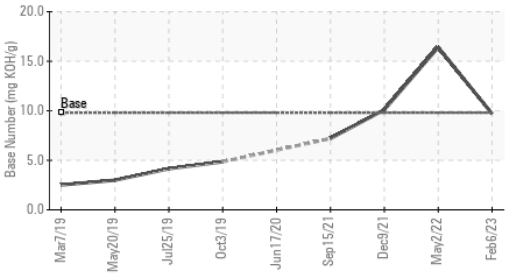
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0064646	GFL0046867	GFL0037284
Sample Date		Client Info		06 Feb 2023	02 May 2022	09 Dec 2021
Machine Age	hrs	Client Info		58081	41623	41200
Oil Age	hrs	Client Info		0	41623	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	6	40	7
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		21	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<1	5	2
Lead	ppm	ASTM D5185m	>40	<1	2	<1
Copper	ppm	ASTM D5185m	>330	16	4	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	▲ 25	17	4
Potassium	ppm	ASTM D5185m	>20	2	▲ 82	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	2.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	5.2	11.5	6
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.6	27.2	19.3
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		6	▲ 392	1
Boron	ppm	ASTM D5185m	0	0	66	5
Barium	ppm	ASTM D5185m	0	5	0	0
Molybdenum	ppm	ASTM D5185m	60	41	66	60
Manganese	ppm	ASTM D5185m	0	2	<1	<1
Magnesium	ppm	ASTM D5185m	1010	805	734	992
Calcium	ppm	ASTM D5185m	1070	1129	1405	1112
Phosphorus	ppm	ASTM D5185m	1150	953	880	1097
Zinc	ppm	ASTM D5185m	1270	1141	1000	1250
Sulfur	ppm	ASTM D5185m	2060	3239	2366	2696
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.1	19.2	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.7	16.4	10.1
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	14.8	14.9

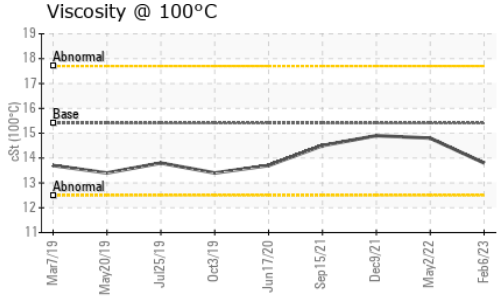
Silicon (ppm)



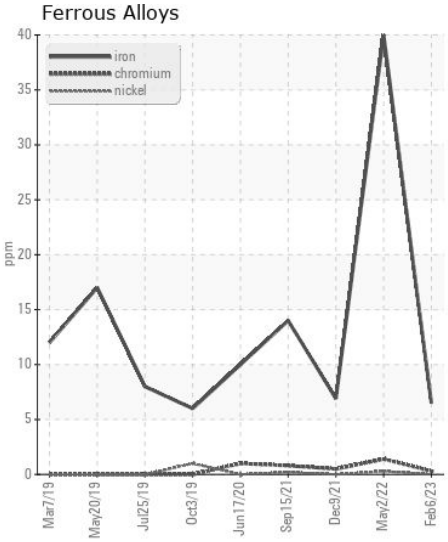
Base Number



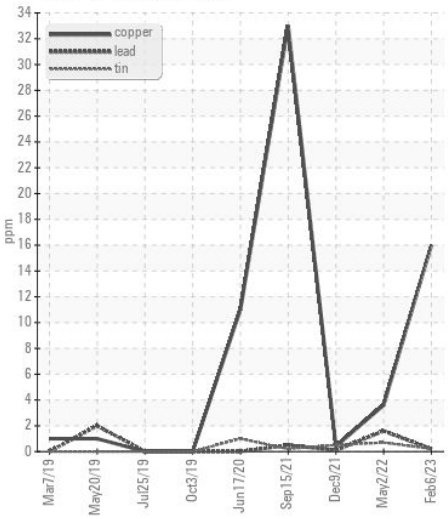
Viscosity @ 100°C



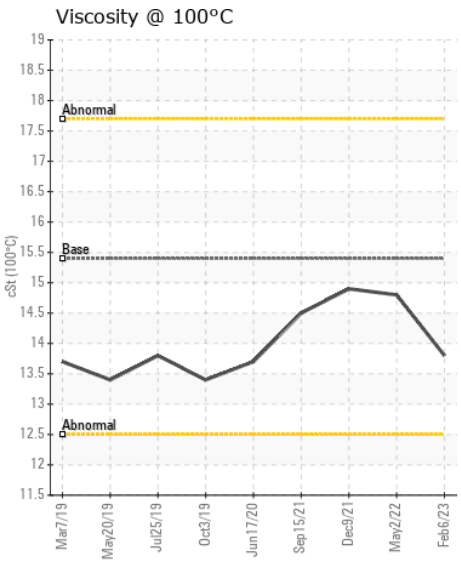
Ferrous Alloys



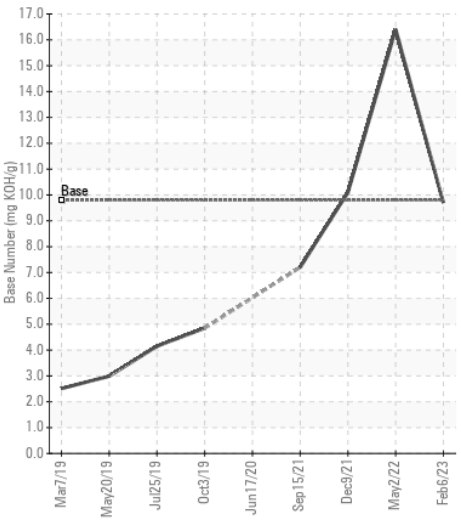
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0064646
Lab Number : 05768661
Unique Number : 10338269
Test Package : FLEET

Recieved : 15 Feb 2023
Diagnosed : 17 Feb 2023
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 - 814 - Little Rock Hauling
4005 Hwy 161 N.
LIttle Rock, AR
US 72117
Contact: Brad Koenig
bkoenig@gflenv.com
T:
F: