FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
929086-205277
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

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

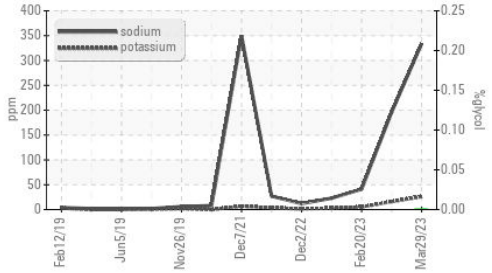
Sodium and/or potassium levels are high. Test for glycol is negative. No other contaminants were detected in the oil.

FLUID CONDITION

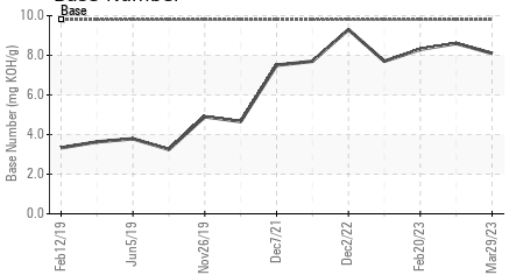
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0074655**	GFL0074660	GFL0074672
Sample Date		Client Info		**29 Mar 2023**	09 Mar 2023	20 Feb 2023
Machine Age	hrs	Client Info		**52467**	52321	52161
Oil Age	hrs	Client Info		**146**	160	571
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ATTENTION**	ATTENTION	NORMAL
Iron	ppm	ASTM D5185m	>100	**22**	16	8
Chromium	ppm	ASTM D5185m	>20	**2**	2	<1
Nickel	ppm	ASTM D5185m	>4	**<1**	1	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	1	<1
Lead	ppm	ASTM D5185m	>40	**4**	2	2
Copper	ppm	ASTM D5185m	>330	**5**	6	5
Tin	ppm	ASTM D5185m	>15	**0**	<1	<1
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	**14**	10	7
Potassium	ppm	ASTM D5185m	>20	**26**	16	5
Fuel		WC Method	>5	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol	%	*ASTM D2982		**0.0**	NEG	NEG
Soot %	%	*ASTM D7844	>3	**0.3**	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	**9.3**	8.4	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	**20.9**	20.0	19.0
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		▲ **334**	▲ 196	41
Boron	ppm	ASTM D5185m	0	**5**	5	5
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**71**	67	58
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	1010	**1109**	932	964
Calcium	ppm	ASTM D5185m	1070	**1214**	1090	1117
Phosphorus	ppm	ASTM D5185m	1150	**1106**	993	951
Zinc	ppm	ASTM D5185m	1270	**1442**	1226	1256
Sulfur	ppm	ASTM D5185m	2060	**3597**	2668	3278
Oxidation	Abs/.1mm	*ASTM D7414	>25	**16.7**	15.5	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**8.1**	8.6	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	**13.5**	13.5	13.7

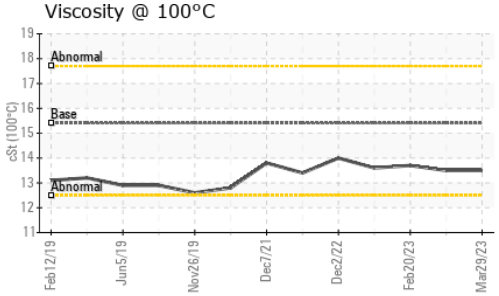
Glycol Contamination



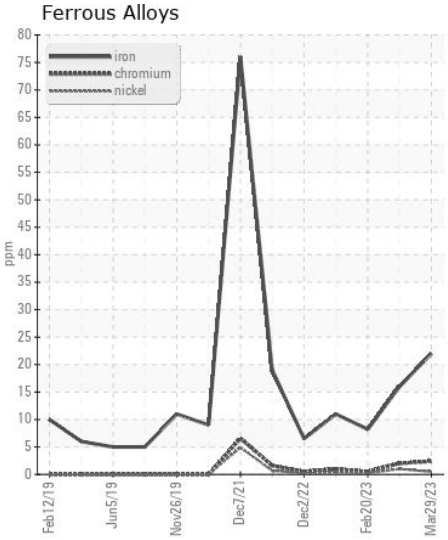
Base Number



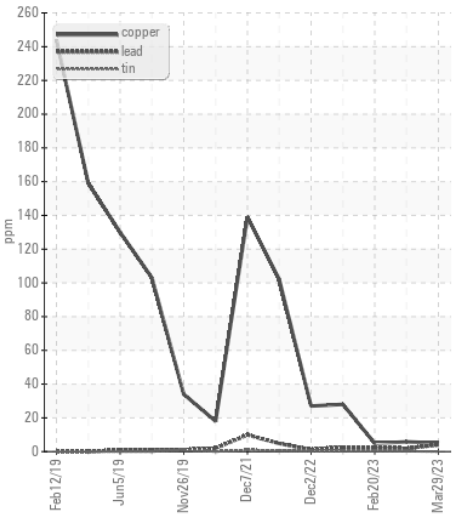
Viscosity @ 100°C



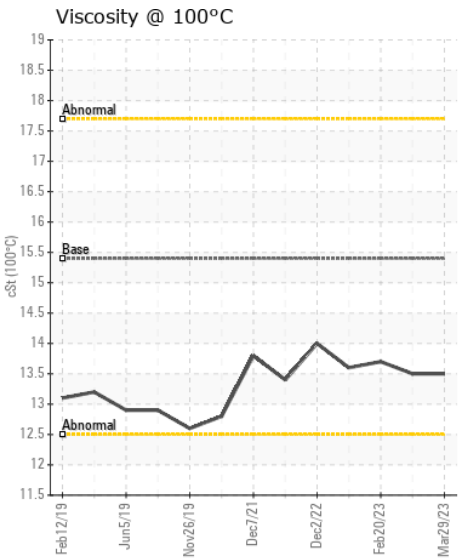
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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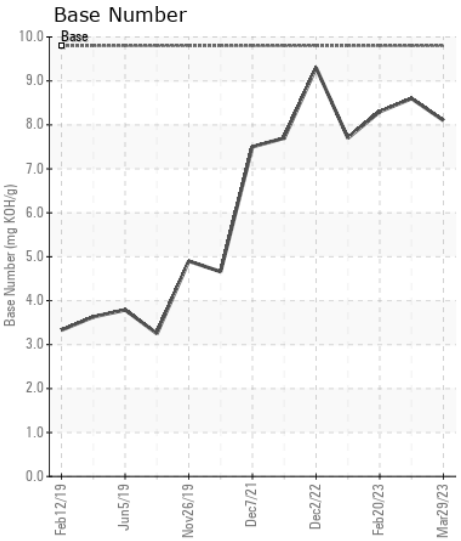

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0074655 **Recieved** : 03 Apr 2023
Lab Number : 05809586 **Diagnosed** : 07 Apr 2023
Unique Number : 10407115 **Diagnostician** : Don Baldridge
Test Package : FLEET (Additional Tests: Glycol)

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)

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