FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(YA150020)
Machine Id
10618
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

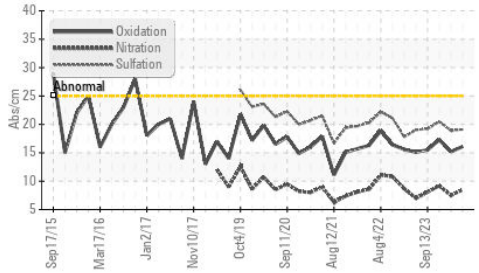
There is no indication of any contamination in the oil.

FLUID CONDITION

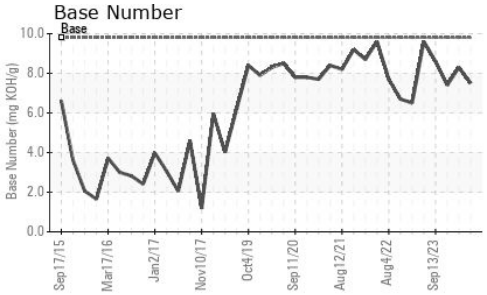
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0118408**	GFL0098143	GFL0098099
Sample Date		Client Info		**21 May 2024**	07 Feb 2024	20 Dec 2023
Machine Age	hrs	Client Info		**14699**	14699	14699
Oil Age	hrs	Client Info		**215**	215	476
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Filter Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>90	**16**	10	20
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	2
Nickel	ppm	ASTM D5185m	>2	**0**	0	0
Titanium	ppm	ASTM D5185m	>2	**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**4**	2	6
Lead	ppm	ASTM D5185m	>40	**1**	0	0
Copper	ppm	ASTM D5185m	>330	**<1**	<1	2
Tin	ppm	ASTM D5185m	>15	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	<1
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**7**	4	10
Potassium	ppm	ASTM D5185m	>20	**3**	<1	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	>6	**0.4**	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	**8.5**	7.5	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	**19.1**	18.9	20.5
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		**1**	<1	2
Boron	ppm	ASTM D5185m	0	**2**	3	3
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**62**	56	63
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	1010	**984**	909	999
Calcium	ppm	ASTM D5185m	1070	**1061**	915	1180
Phosphorus	ppm	ASTM D5185m	1150	**1059**	1006	1126
Zinc	ppm	ASTM D5185m	1270	**1284**	1223	1375
Sulfur	ppm	ASTM D5185m	2060	**3399**	2795	3188
Oxidation	Abs/.1mm	*ASTM D7414	>25	**16.1**	15.2	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**7.5**	8.3	7.4
Visc @ 100°C	cSt	ASTM D445	15.4	**14.2**	14.3	14.2

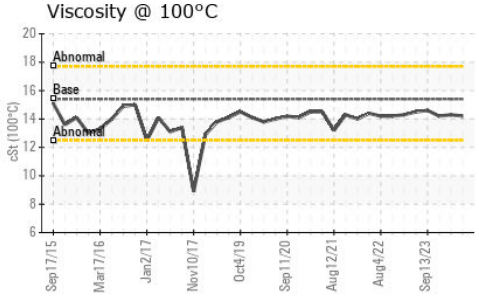
FT-IR (Direct Trend)



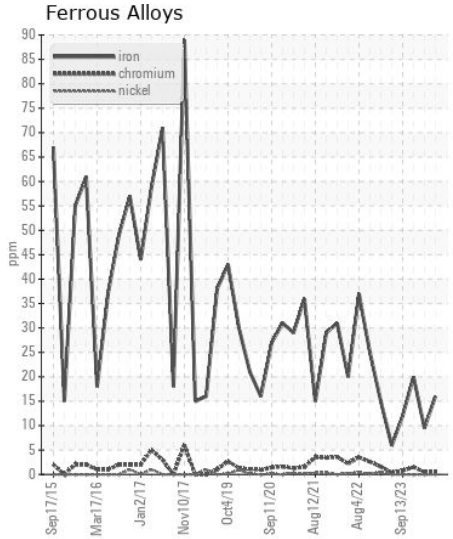
Base Number



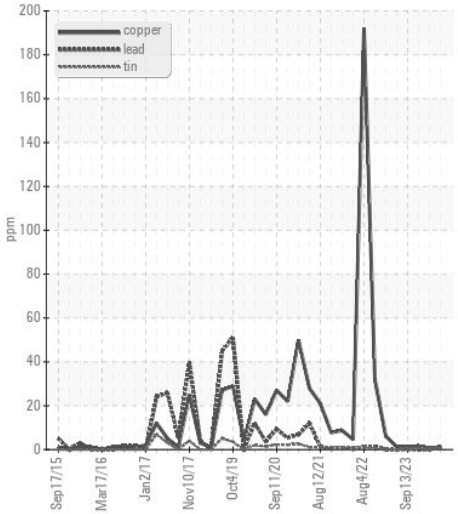
Viscosity @ 100°C



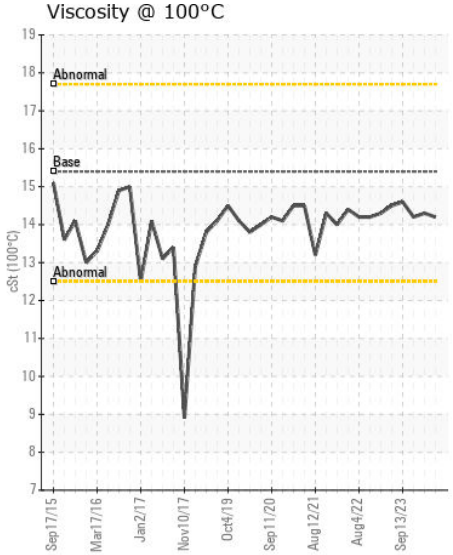
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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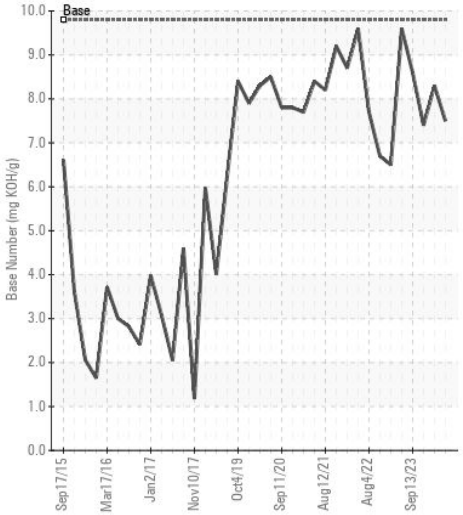

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0118408
Lab Number : 06187035
Unique Number : 11043787
Test Package : FLEET

Received : 21 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 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)

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