FLEET LUBE 360™ OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
723033-303003
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

WEAR

All component wear rates are normal.

CONTAMINATION

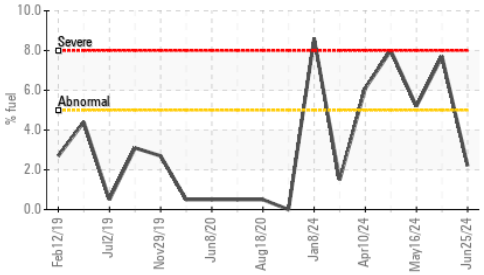
Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

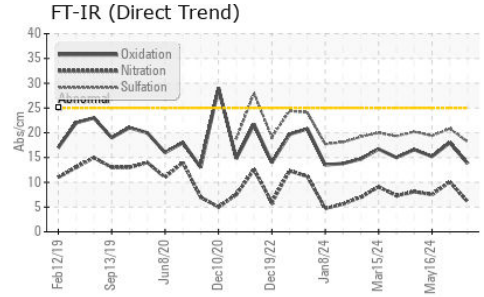
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122898	GFL0122874	GFL0118840
Sample Date		Client Info		25 Jun 2024	05 Jun 2024	16 May 2024
Machine Age	hrs	Client Info		22011	21891	21737
Oil Age	hrs	Client Info		22550	22430	135
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				MARGINAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>80	14	38	18
Chromium	ppm	ASTM D5185m	>5	<1	2	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>30	3	3	3
Lead	ppm	ASTM D5185m	>30	1	6	2
Copper	ppm	ASTM D5185m	>150	44	▲ 180	25
Tin	ppm	ASTM D5185m	>5	<1	1	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	4	7	5
Potassium	ppm	ASTM D5185m	>20	3	4	4
Fuel	%	ASTM D3524	>5	▲ 2.2	▲ 7.7	▲ 5.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.8	0.5
Nitration	Abs/cm	*ASTM D7624	>20	6.1	10.1	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	20.8	19.4
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		3	7	5
Boron	ppm	ASTM D5185m	0	3	<1	<1
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	60	58	58	56
Manganese	ppm	ASTM D5185m	0	<1	1	0
Magnesium	ppm	ASTM D5185m	1010	891	958	849
Calcium	ppm	ASTM D5185m	1070	1079	1107	1019
Phosphorus	ppm	ASTM D5185m	1150	961	1014	974
Zinc	ppm	ASTM D5185m	1270	1192	1269	1125
Sulfur	ppm	ASTM D5185m	2060	2816	3059	2874
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	18.0	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.7	7.2	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	12.5	12.8

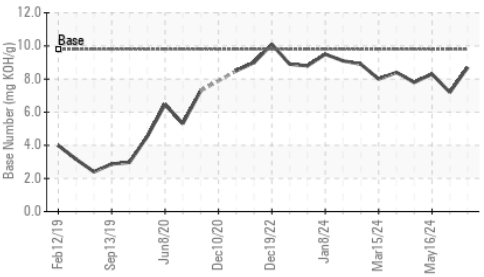
Fuel Dilution



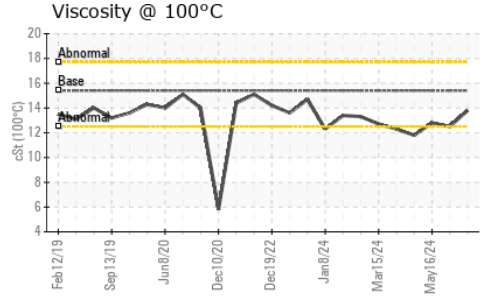
FT-IR (Direct Trend)



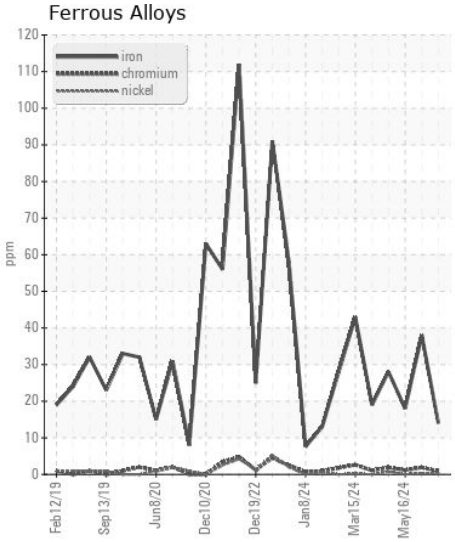
Base Number



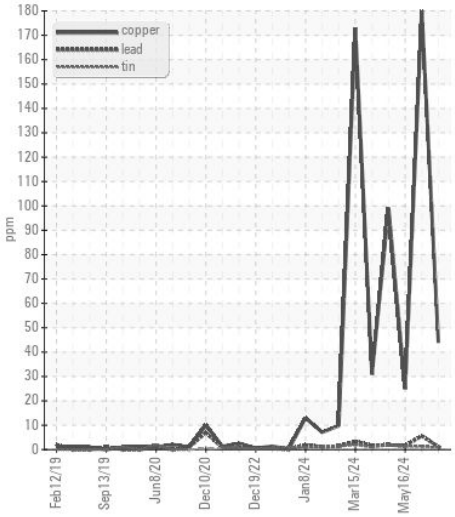
Viscosity @ 100°C



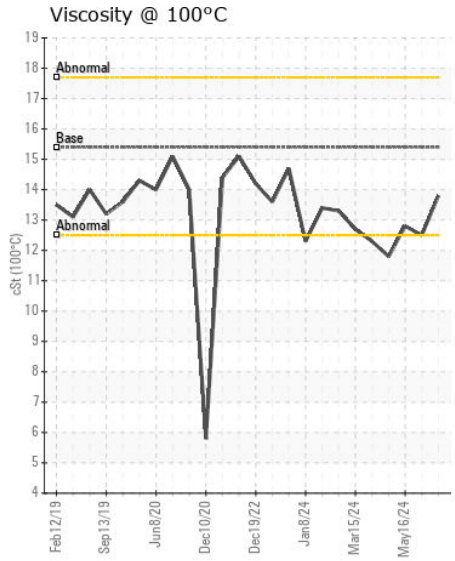
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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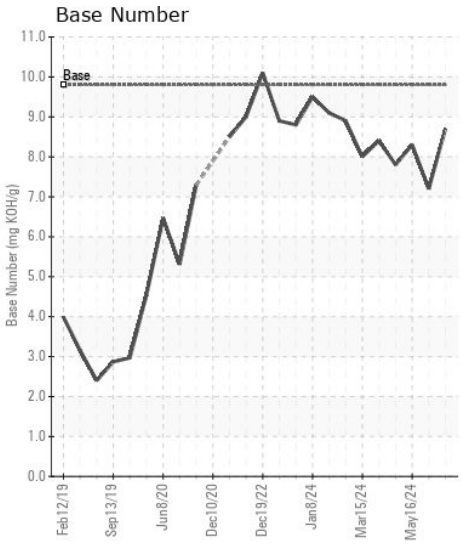

Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: GFL0122898	**Received**	: 01 Jul 2024
Lab Number	: 06225642	**Tested**	: 03 Jul 2024
Unique Number	: 11103839	**Diagnosed**	: 03 Jul 2024 - Wes Davis
Test Package	: FLEET (Additional Tests: PercentFuel)		

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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