



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**424048**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0106099</b>	GFL0078624	GFL0082039
Sample Date		Client Info		<b>03 Jan 2024</b>	09 Nov 2023	20 Jun 2023
Machine Age	hrs	Client Info		<b>24715</b>	24436	23735
Oil Age	hrs	Client Info		<b>630</b>	600	600
Filter Age	hrs	Client Info		<b>630</b>	600	600
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>5</b>	11	33
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	0	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

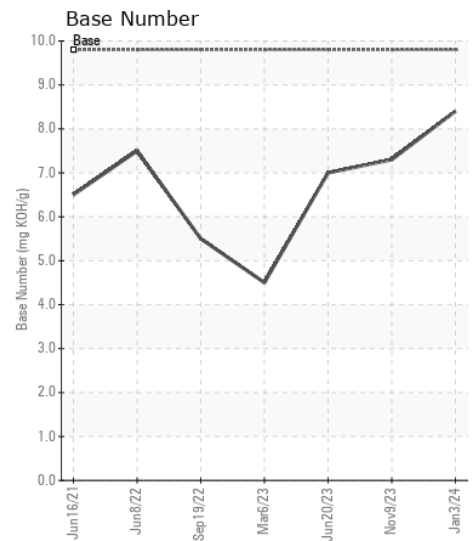
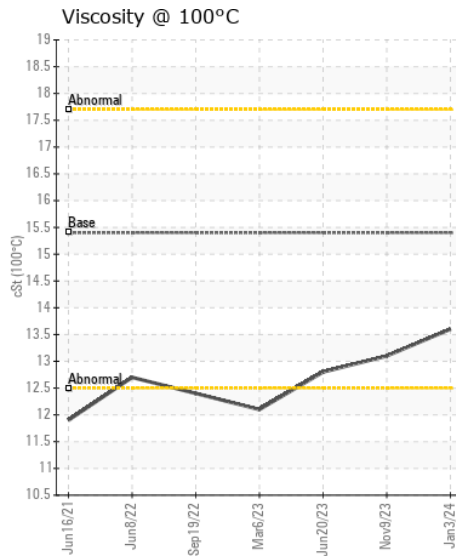
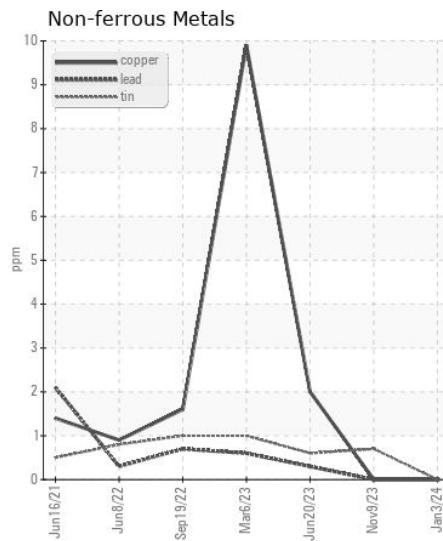
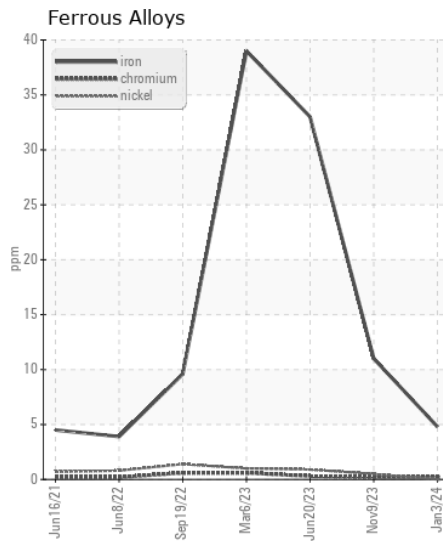
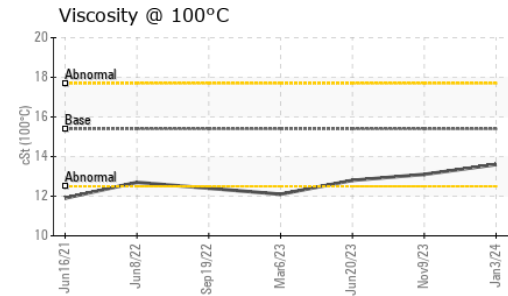
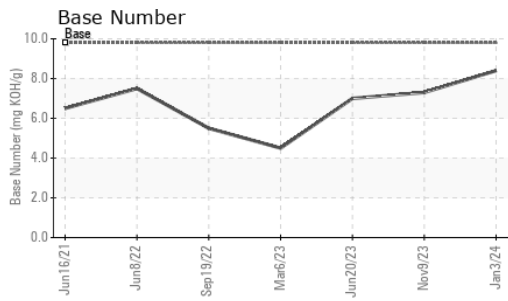
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>0.3</b>	0.5	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	9.4	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.8</b>	19.0	20.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m		<b>2</b>	1	<1
Boron	ppm	ASTM D5185m	0	<b>4</b>	5	5
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	61	66
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>925</b>	956	805
Calcium	ppm	ASTM D5185m	1070	<b>1029</b>	1051	1158
Phosphorus	ppm	ASTM D5185m	1150	<b>1016</b>	1004	936
Zinc	ppm	ASTM D5185m	1270	<b>1192</b>	1250	1155
Sulfur	ppm	ASTM D5185m	2060	<b>3373</b>	3024	3352
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.3</b>	15.4	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.4</b>	7.3	7.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	13.1	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106099 **Received** : 09 Jan 2024  
**Lab Number** : 06055741 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821690 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 152 - Jacksonville**  
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 US 32256  
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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)