



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



Area  
**(BC16368)**  
Machine Id  
**840M**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0117691</b>	GFL0108827	GFL0108840
Sample Date		Client Info		<b>10 Apr 2024</b>	03 Feb 2024	16 Jan 2024
Machine Age	hrs	Client Info		<b>11296</b>	10832	10642
Oil Age	hrs	Client Info		<b>10832</b>	600	10446
Filter Age	hrs	Client Info		<b>0</b>	600	10446
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>45</b>	58	80
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	3	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	6	6
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	5	<1
Copper	ppm	ASTM D5185m	>150	<b>29</b>	6	71
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

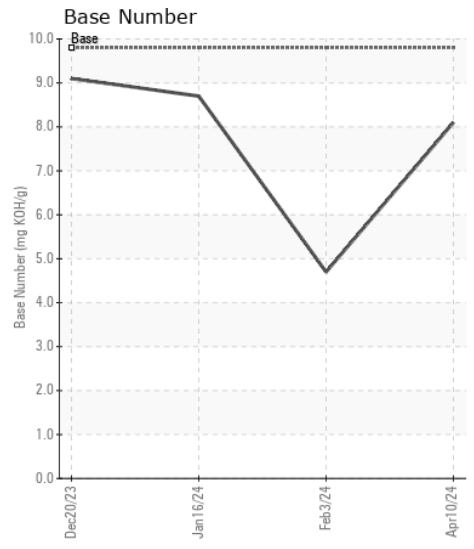
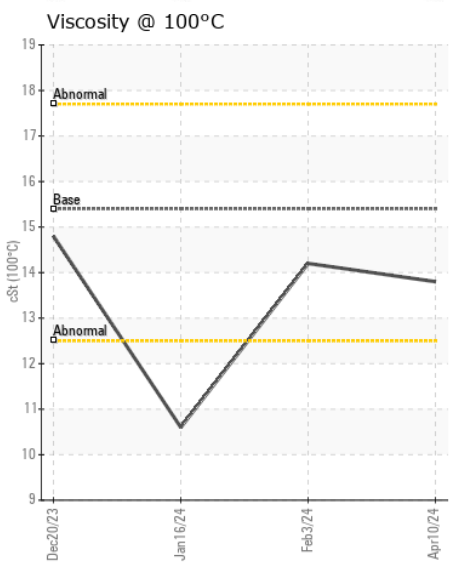
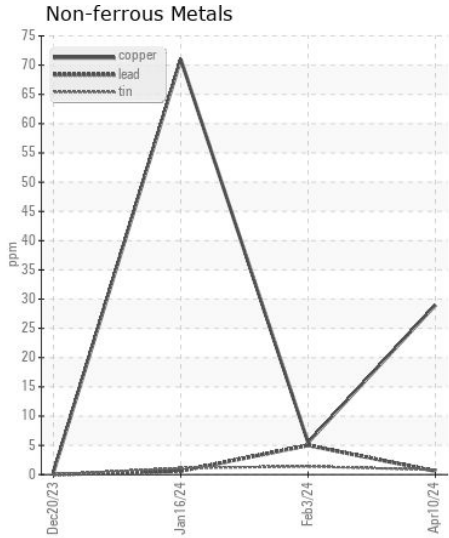
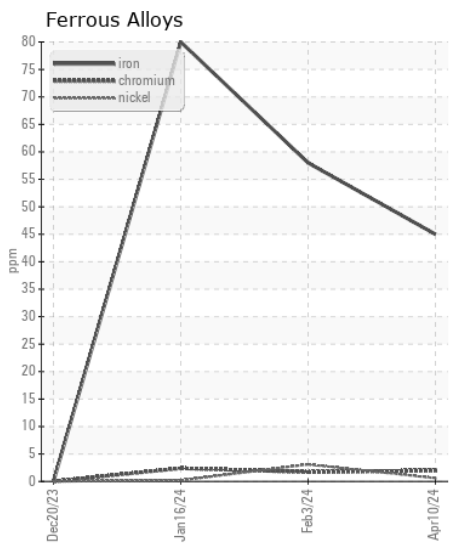
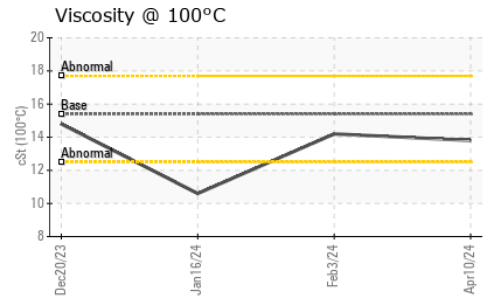
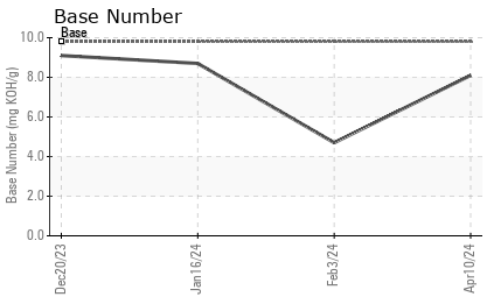
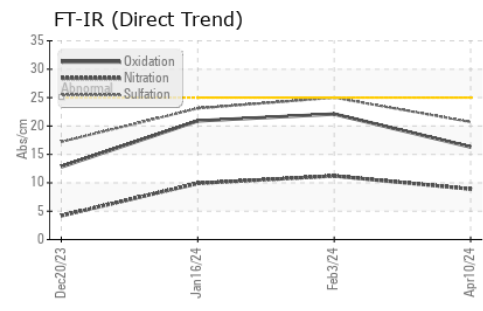
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>8</b>	5	▲ 36
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	5	1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 2.1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1</b>	1.5	1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.9</b>	11.2	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.7</b>	25.0	23.1
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>1</b>	8	4
Boron	ppm	ASTM D5185m	0	<b>3</b>	<1	36
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	9
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	61	44
Manganese	ppm	ASTM D5185m	0	<b>1</b>	2	4
Magnesium	ppm	ASTM D5185m	1010	<b>911</b>	936	564
Calcium	ppm	ASTM D5185m	1070	<b>1151</b>	1057	1720
Phosphorus	ppm	ASTM D5185m	1150	<b>1011</b>	1018	826
Zinc	ppm	ASTM D5185m	1270	<b>1192</b>	1304	997
Sulfur	ppm	ASTM D5185m	2060	<b>2871</b>	2338	2436
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.3</b>	22.1	20.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.1</b>	4.7	8.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	14.2	▲ 10.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0117691  
**Lab Number** : 06148399  
**Unique Number** : 10978477  
**Test Package** : FLEET  
**Received** : 15 Apr 2024  
**Tested** : 16 Apr 2024  
**Diagnosed** : 16 Apr 2024 - Wes Davis

**GFL Environmental - 415 - Michigan East**  
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 Sterling Heights, MI  
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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)