



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



Machine Id  
**913080**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (36 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0110043</b>	GFL0109980	GFL0104260
Sample Date		Client Info		<b>27 Jan 2024</b>	17 Jan 2024	02 Jan 2024
Machine Age	hrs	Client Info		<b>3421</b>	3280	3132
Oil Age	hrs	Client Info		<b>600</b>	600	3132
Filter Age	hrs	Client Info		<b>600</b>	600	3132
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	>120	<b>22</b>	22	47
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	4	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	9
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	2	<1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	2
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	17	40
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	5
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	▲ HEAVY
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

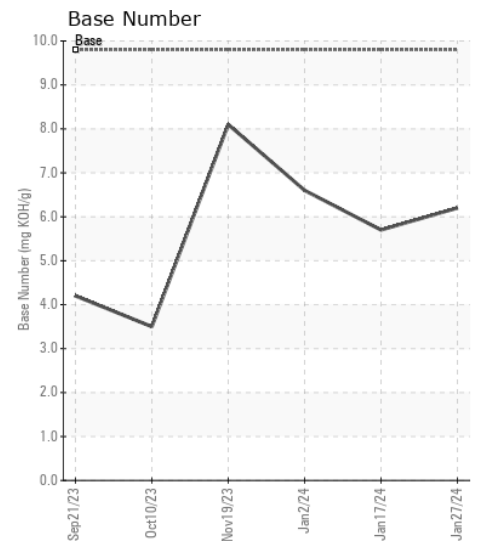
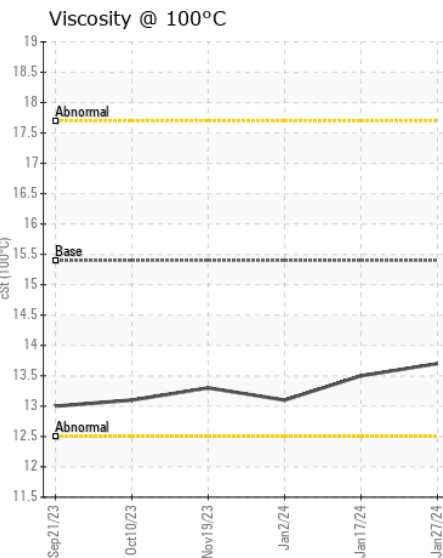
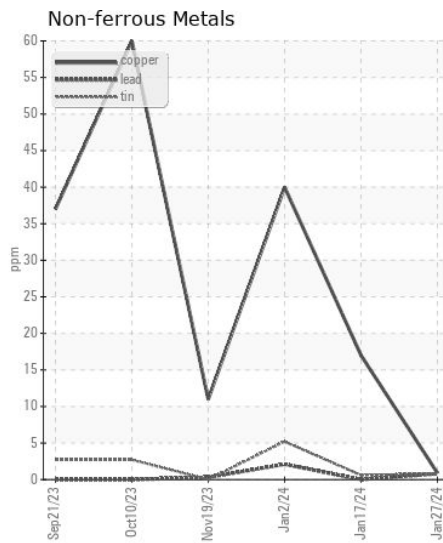
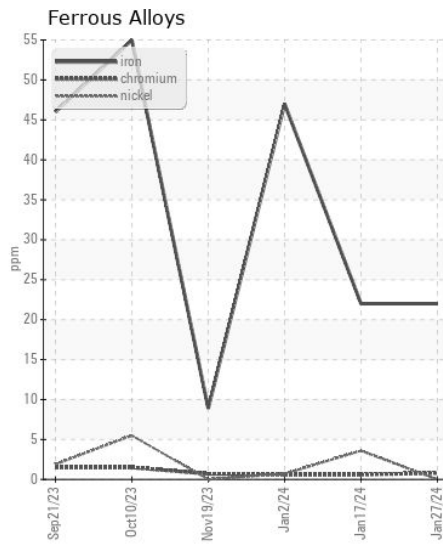
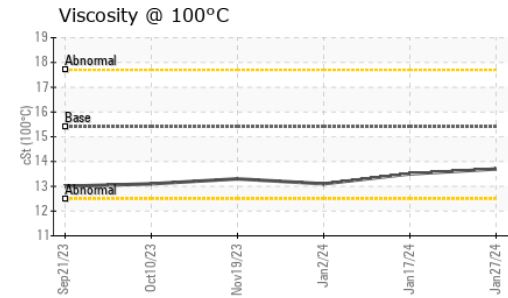
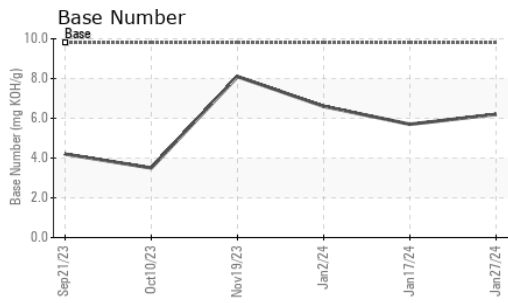
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	8	11
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	3
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>0.9</b>	0.8	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	9.1	3.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	21.1	17.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	▲ HEAVY
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>5</b>	4	6
Boron	ppm	ASTM D5185m	0	<b>0</b>	<1	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m	60	<b>48</b>	56	0
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	3
Magnesium	ppm	ASTM D5185m	1010	<b>809</b>	890	79
Calcium	ppm	ASTM D5185m	1070	<b>885</b>	1086	3001
Phosphorus	ppm	ASTM D5185m	1150	<b>919</b>	801	1061
Zinc	ppm	ASTM D5185m	1270	<b>1099</b>	1098	1288
Sulfur	ppm	ASTM D5185m	2060	<b>2513</b>	2205	3707
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.6</b>	17.7	13.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.2</b>	5.7	6.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	13.5	13.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110043 **Received** : 01 Feb 2024  
**Lab Number** : 06076524 **Diagnosed** : 01 Feb 2024  
**Unique Number** : 10858615 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 410 - Michigan West**  
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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)