



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



Machine Id  
**729013-1260**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (24 QTS)**

**RECOMMENDATION**

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0120891</b>	GFL0110323	GFL0102772
Sample Date		Client Info		<b>21 Jun 2024</b>	05 Apr 2024	11 Jan 2024
Machine Age	hrs	Client Info		<b>15817</b>	15185	14587
Oil Age	hrs	Client Info		<b>632</b>	598	606
Filter Age	hrs	Client Info		<b>632</b>	598	606
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>60</b>	19	20
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>4</b>	1	2
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>150	<b>1</b>	<1	1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

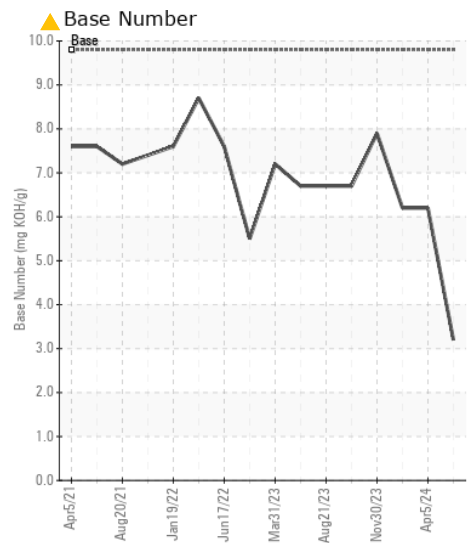
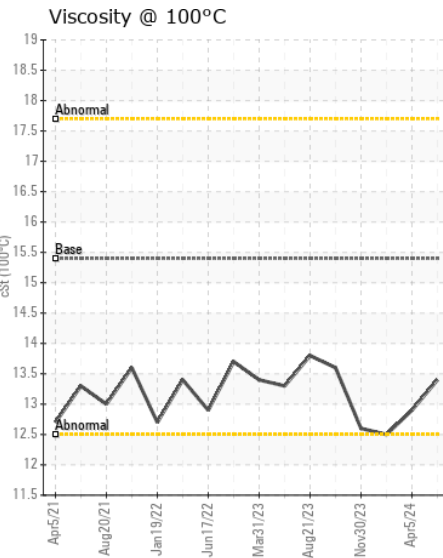
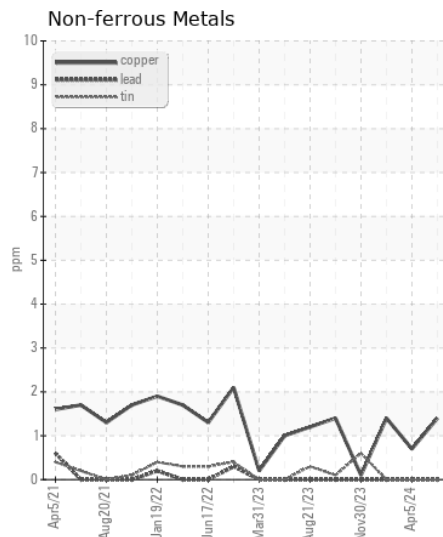
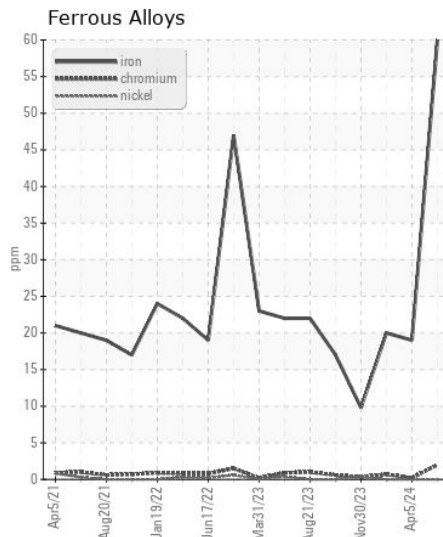
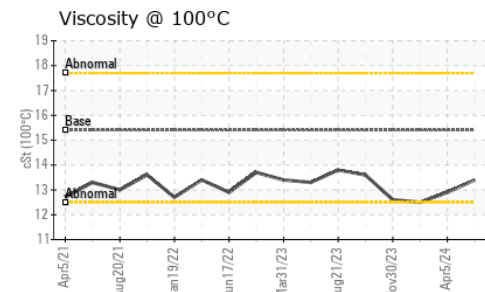
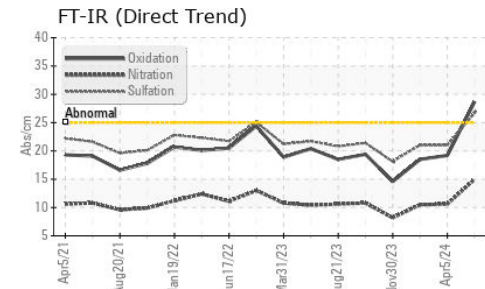
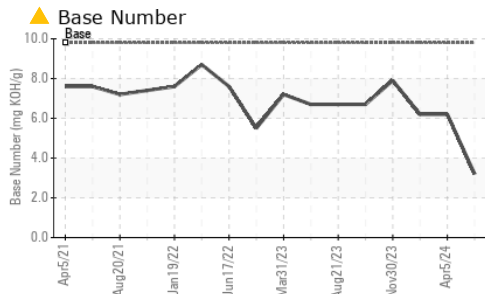
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>9</b>	2	4
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	1	3
Fuel		WC Method	>5	<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	>3	<b>1.3</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>15.0</b>	10.6	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.7</b>	21.0	21.0
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 level is low. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>7</b>	6	5
Boron	ppm	ASTM D5185m	0	<b>7</b>	2	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>53</b>	60	61
Manganese	ppm	ASTM D5185m	0	<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>843</b>	913	883
Calcium	ppm	ASTM D5185m	1070	<b>983</b>	1129	1085
Phosphorus	ppm	ASTM D5185m	1150	<b>911</b>	1000	963
Zinc	ppm	ASTM D5185m	1270	<b>1135</b>	1227	1175
Sulfur	ppm	ASTM D5185m	2060	<b>2914</b>	3259	2756
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>28.7</b>	19.2	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>3.2</b>	6.2	6.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	12.9	12.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0120891  
**Lab Number** : 06220514  
**Unique Number** : 11098711  
**Test Package** : FLEET

**Received** : 25 Jun 2024  
**Tested** : 26 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Don Baldrige

**GFL Environmental - 622 - Traverse City Hauling**  
 160 Hughes Dr  
 Traverse City, MI  
 US 49686  
 Contact: GARY BREWER

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)

T:  
F: