



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



Machine Id  
**4559M**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (5 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0115160</b>	GFL0106695	GFL0097702
Sample Date		Client Info		<b>09 Apr 2024</b>	06 Feb 2024	19 Oct 2023
Machine Age	hrs	Client Info		<b>11524</b>	11187	10574
Oil Age	hrs	Client Info		<b>337</b>	613	381
Filter Age	hrs	Client Info		<b>337</b>	613	381
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>51</b>	▲ 83	34
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>6</b>	5	2
Lead	ppm	ASTM D5185m	>25	<b>1</b>	1	4
Copper	ppm	ASTM D5185m	>100	<b>2</b>	4	2
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

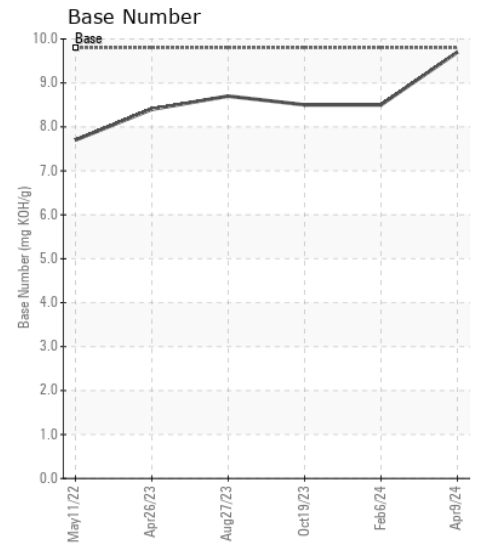
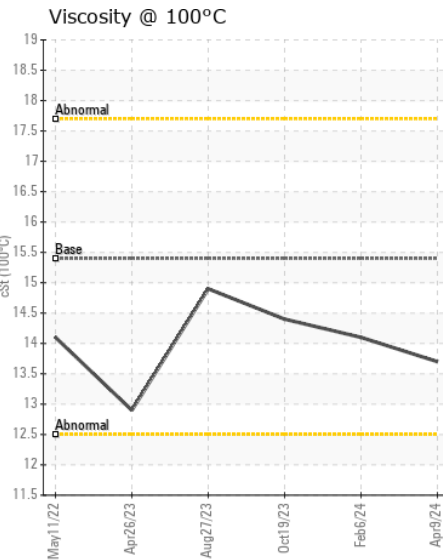
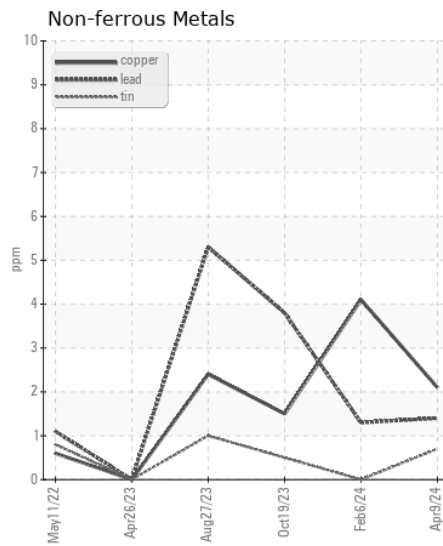
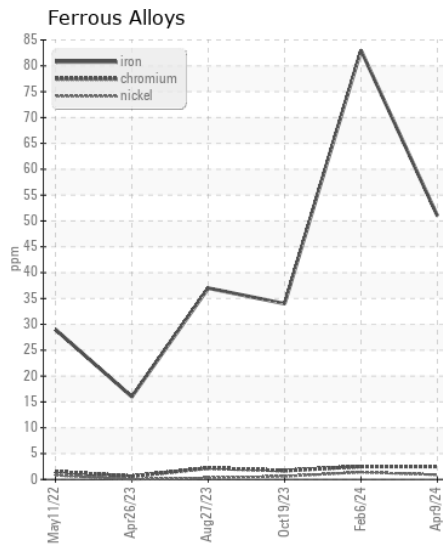
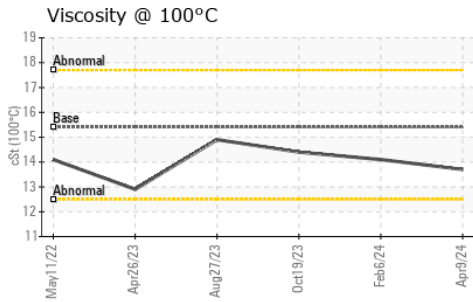
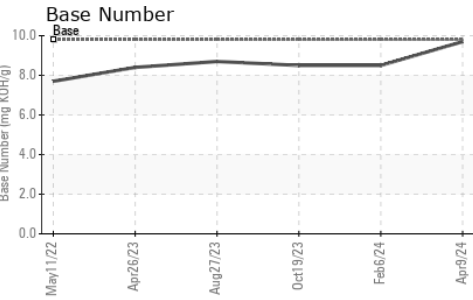
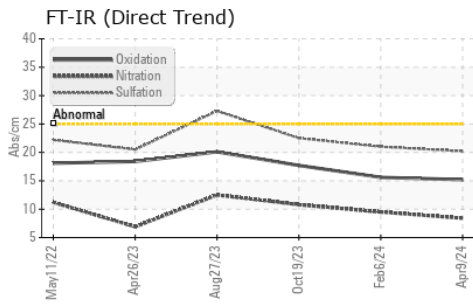
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	9	4
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	6	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	>6	<b>1.1</b>	1.2	2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	9.5	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.2</b>	21.0	22.5
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>11</b>	39	4
Boron	ppm	ASTM D5185m	0	<b>2</b>	4	1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	5
Molybdenum	ppm	ASTM D5185m	60	<b>84</b>	61	63
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1381</b>	993	908
Calcium	ppm	ASTM D5185m	1070	<b>1491</b>	1046	1107
Phosphorus	ppm	ASTM D5185m	1150	<b>1575</b>	1140	1030
Zinc	ppm	ASTM D5185m	1270	<b>1855</b>	1338	1215
Sulfur	ppm	ASTM D5185m	2060	<b>4880</b>	3213	2731
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.2</b>	15.6	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.7</b>	8.5	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	14.1	14.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0115160  
**Lab Number** : 06153981  
**Unique Number** : 10989404  
**Test Package** : FLEET

**Received** : 19 Apr 2024  
**Tested** : 22 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Don Baldrige

**GFL Environmental - 405 - Arbor Hills**  
 7811 Chubb Rd  
 NORTHVILLE, MI  
 US 48168

Contact: Anthony Hopkins  
 ahopkins@gflenv.com

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: