



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



Machine Id  
**4629M**  
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>GFL0106665</b>	GFL0097714	GFL0087300
Sample Date		Client Info		<b>29 Jan 2024</b>	12 Nov 2023	27 Aug 2023
Machine Age	hrs	Client Info		<b>19386</b>	18883	18336
Oil Age	hrs	Client Info		<b>503</b>	547	700
Filter Age	hrs	Client Info		<b>503</b>	547	700
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>30</b>	34	31
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	2	1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	<1
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	3	5
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**

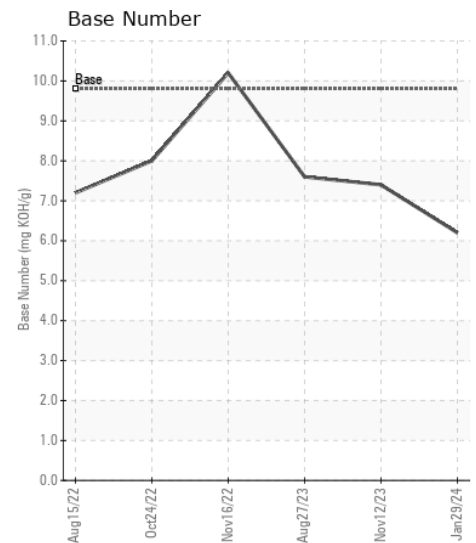
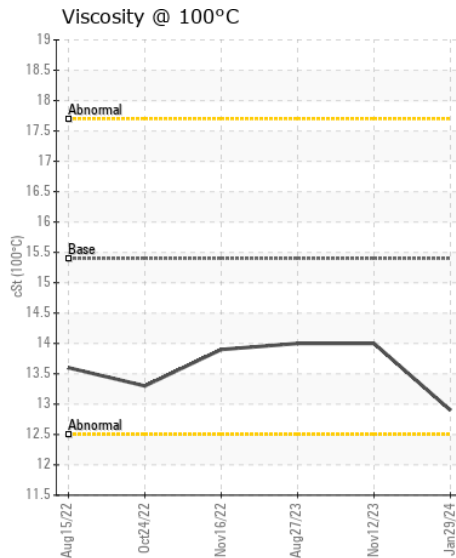
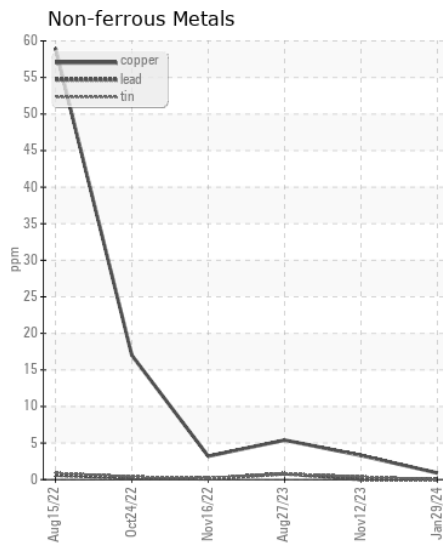
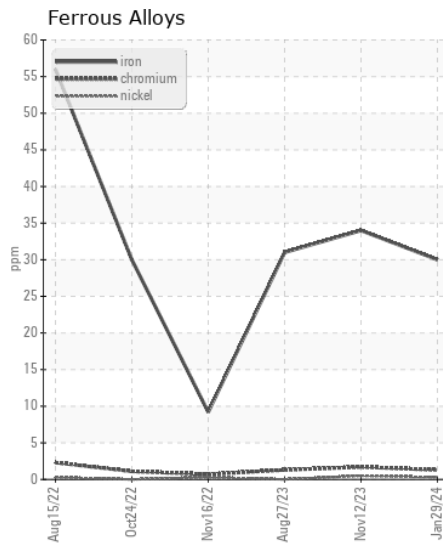
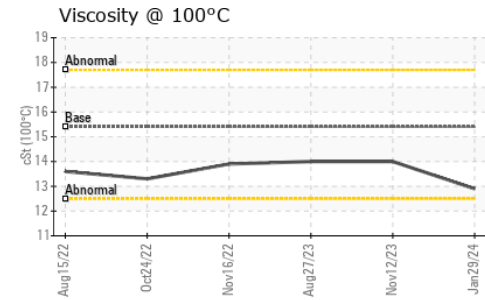
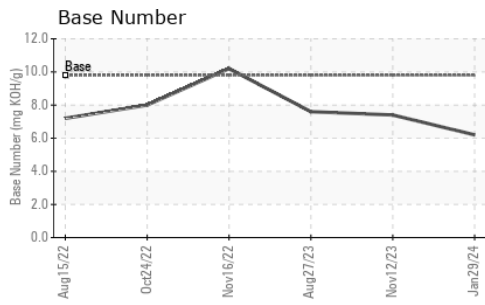
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	10	13
Potassium	ppm	ASTM D5185m	>20	<b>3</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	>6	<b>0.8</b>	0.9	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.1</b>	10.2	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.9</b>	21.1	24.7
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>18</b>	8	12
Boron	ppm	ASTM D5185m	0	<b>0</b>	2	6
Barium	ppm	ASTM D5185m	0	<b>12</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>52</b>	56	56
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185m	1010	<b>769</b>	894	905
Calcium	ppm	ASTM D5185m	1070	<b>848</b>	1068	1219
Phosphorus	ppm	ASTM D5185m	1150	<b>833</b>	974	1006
Zinc	ppm	ASTM D5185m	1270	<b>1042</b>	1242	1272
Sulfur	ppm	ASTM D5185m	2060	<b>2406</b>	2779	3275
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.8</b>	17.3	20.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.2</b>	7.4	7.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.9</b>	14.0	14.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106665  
**Lab Number** : 06088570  
**Unique Number** : 10876015  
**Test Package** : FLEET

**Received** : 14 Feb 2024  
**Tested** : 15 Feb 2024  
**Diagnosed** : 15 Feb 2024 - Wes Davis

**GFL Environmental - 405 - Arbor Hills**  
 7400 Napier Rd  
 NORTHVILLE, MI  
 US 48168  
 Contact: John Nahal  
 jnahal@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: