



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



Area  
**{UNASSIGNED}**  
Machine Id  
**914022**  
Component  
**1 Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (9 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0106637</b>	GFL0097718	GFL0087252
Sample Date		Client Info		<b>03 Jan 2024</b>	26 Oct 2023	10 Sep 2023
Machine Age	hrs	Client Info		<b>1733</b>	1145	741
Oil Age	hrs	Client Info		<b>588</b>	500	741
Filter Age	hrs	Client Info		<b>588</b>	500	741
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>16</b>	40	44
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	3	2
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	6
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>31</b>	110	181
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	3
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

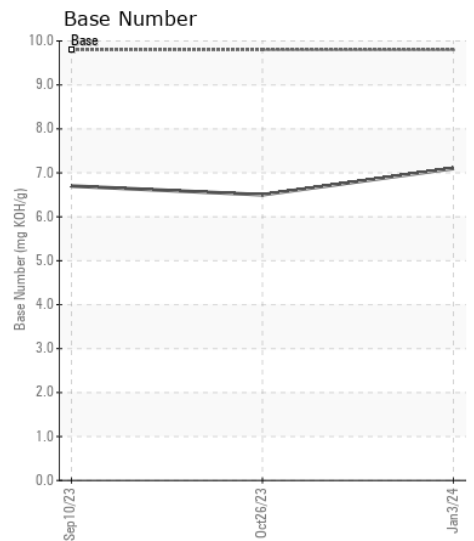
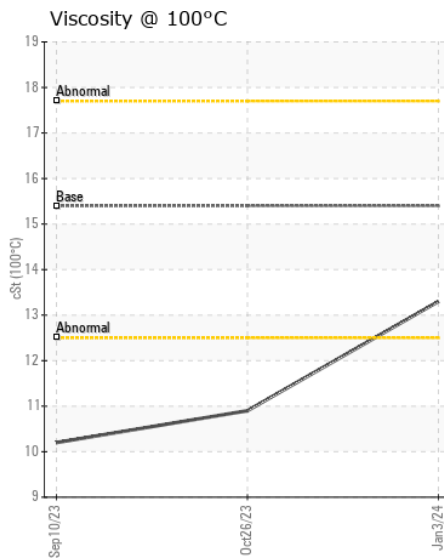
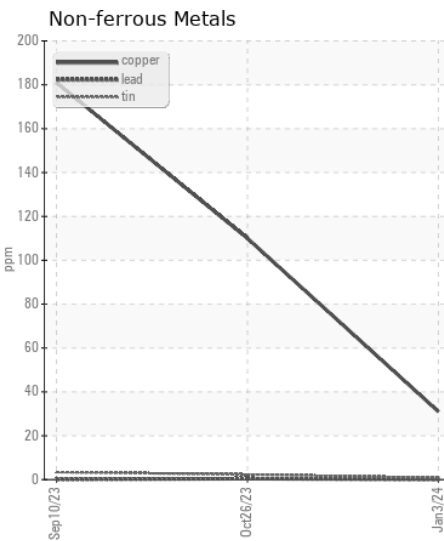
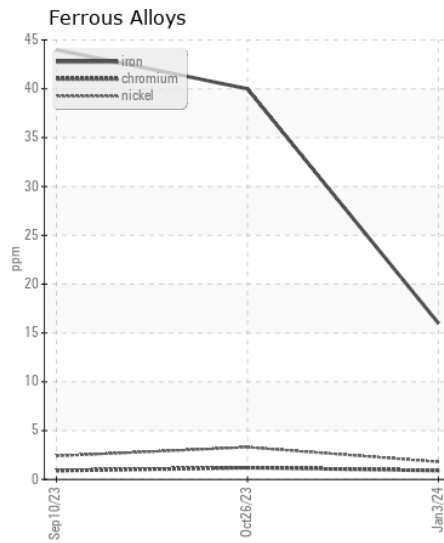
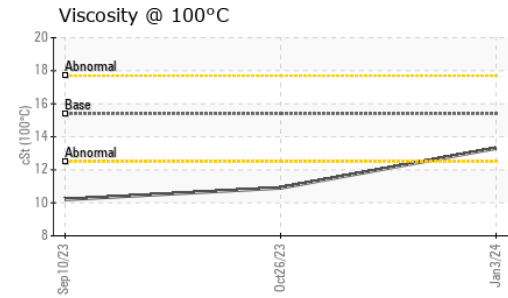
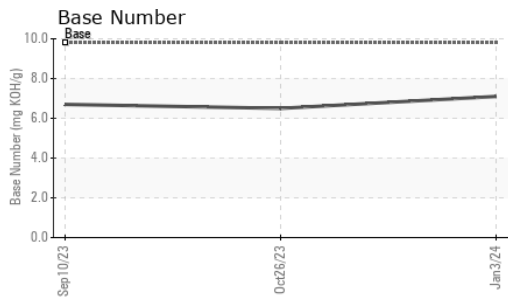
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	▲ 53	▲ 60
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	5	9
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>0.4</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	10.5	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.0</b>	23.7	23.9
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>&lt;1</b>	7	2
Boron	ppm	ASTM D5185m	0	<b>4</b>	80	140
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	103	121
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	4	5
Magnesium	ppm	ASTM D5185m	1010	<b>880</b>	757	666
Calcium	ppm	ASTM D5185m	1070	<b>1019</b>	1392	1430
Phosphorus	ppm	ASTM D5185m	1150	<b>945</b>	755	696
Zinc	ppm	ASTM D5185m	1270	<b>1143</b>	945	889
Sulfur	ppm	ASTM D5185m	2060	<b>2731</b>	2142	2409
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	22.7	23.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.1</b>	6.5	6.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	▲ 10.9	▲ 10.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106637 **Received** : 11 Jan 2024  
**Lab Number** : 06058593 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829975 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 405 - Arbor Hills**  
 7400 Napier 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)