



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

Machine Id  
**920118**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0106954</b>	GFL0073246	GFL0073248
Sample Date		Client Info		<b>19 Feb 2024</b>	03 Oct 2023	05 Jun 2023
Machine Age	hrs	Client Info		<b>8857</b>	8186	7441
Oil Age	hrs	Client Info		<b>325</b>	745	300
Filter Age	hrs	Client Info		<b>325</b>	745	300
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>11</b>	14	13
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	0	15
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185m	>85	<b>&lt;1</b>	2	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

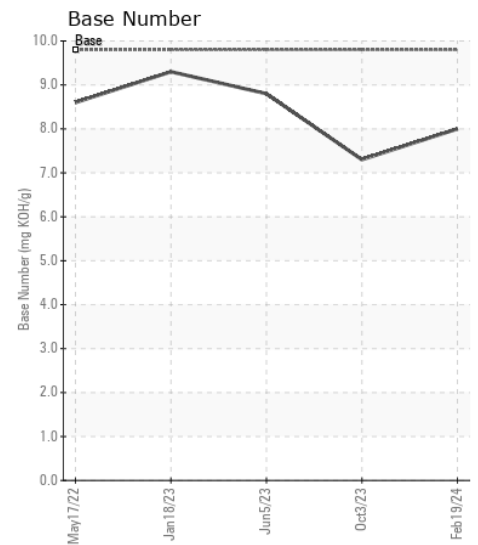
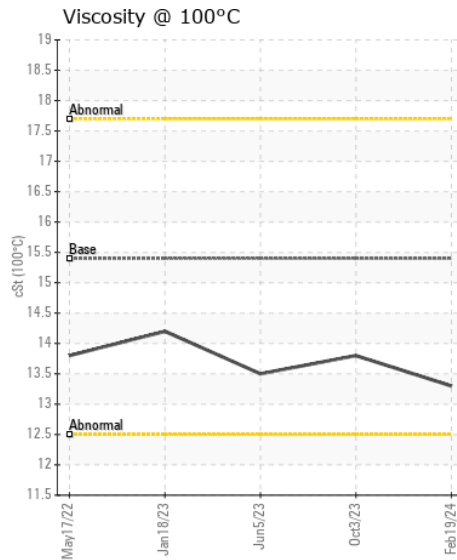
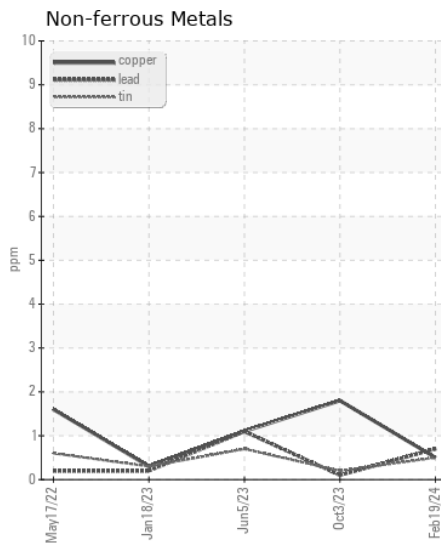
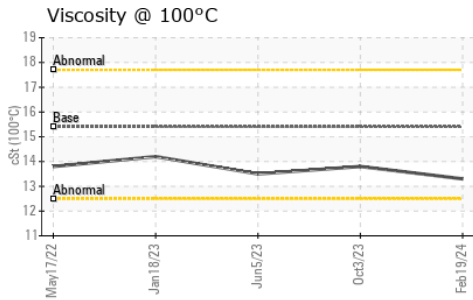
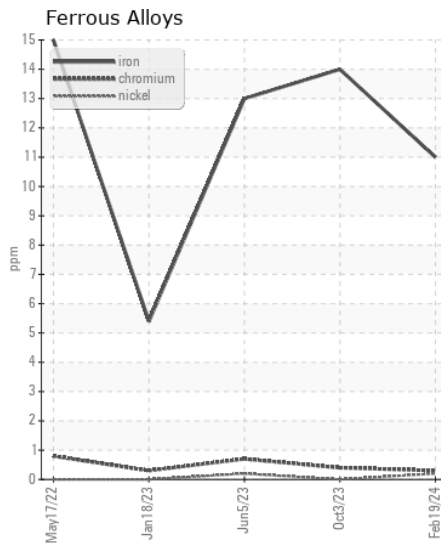
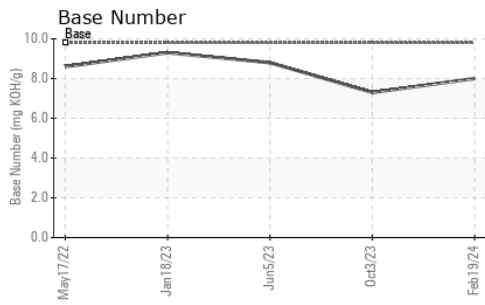
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>5</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	3	4
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>0.5</b>	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	8.5	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.2</b>	20.0	20.3
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>29</b>	0	2
Boron	ppm	ASTM D5185m	0	<b>6</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	60	<b>82</b>	64	63
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1232</b>	931	1057
Calcium	ppm	ASTM D5185m	1070	<b>1359</b>	1072	1178
Phosphorus	ppm	ASTM D5185m	1150	<b>1204</b>	993	1061
Zinc	ppm	ASTM D5185m	1270	<b>1611</b>	1235	1377
Sulfur	ppm	ASTM D5185m	2060	<b>3674</b>	2735	3797
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.5</b>	15.9	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.0</b>	7.3	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	13.8	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106954  
**Lab Number** : 06104099  
**Unique Number** : 10902329  
**Test Package** : FLEET

**Received** : 29 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 29 Feb 2024 - Wes Davis

**GFL Environmental - 097 - Knoxville Hauling**  
 1901 Sutherland Ave  
 Knoxville, TN  
 US 37921  
 Contact: RICKY DUNLAP

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)

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F: