



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



Area  
**(QB18889)**  
Machine Id  
**913022**  
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>GFL0104557</b>	GFL0092615	GFL0082537
Sample Date		Client Info		<b>05 Feb 2024</b>	06 Nov 2023	14 Aug 2023
Machine Age	hrs	Client Info		<b>3032</b>	2423	1818
Oil Age	hrs	Client Info		<b>610</b>	605	610
Filter Age	hrs	Client Info		<b>610</b>	605	610
Oil Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>14</b>	18	52
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>5	<b>3</b>	2	▲ 10
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>14</b>	30	69
Tin	ppm	ASTM D5185m	>15	<b>1</b>	1	3
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**

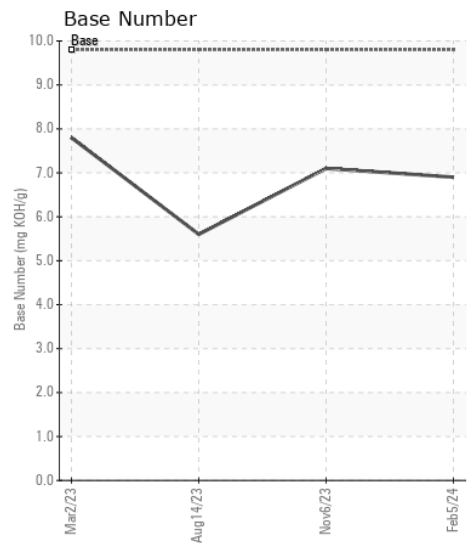
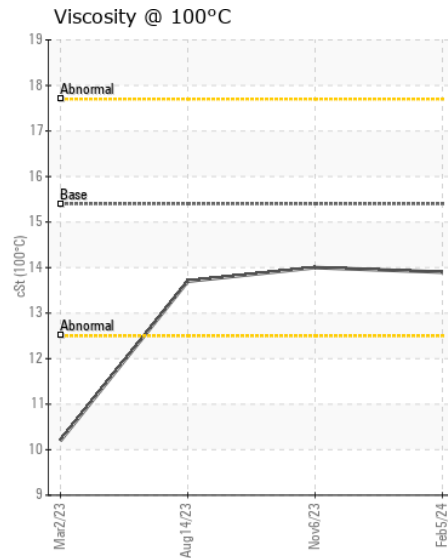
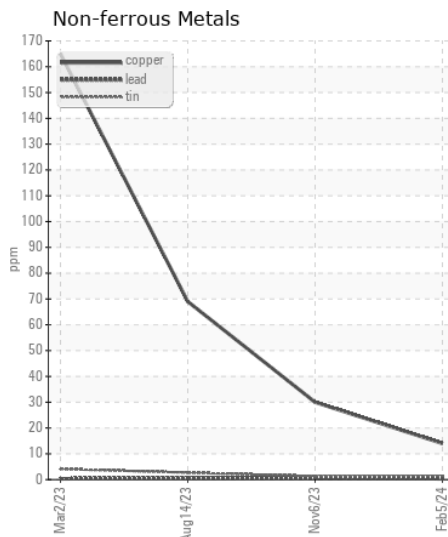
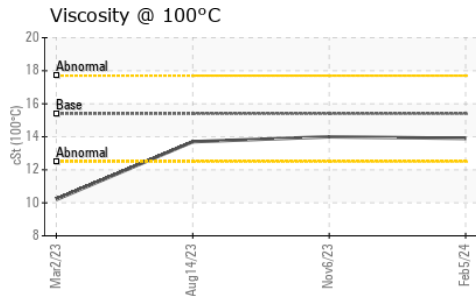
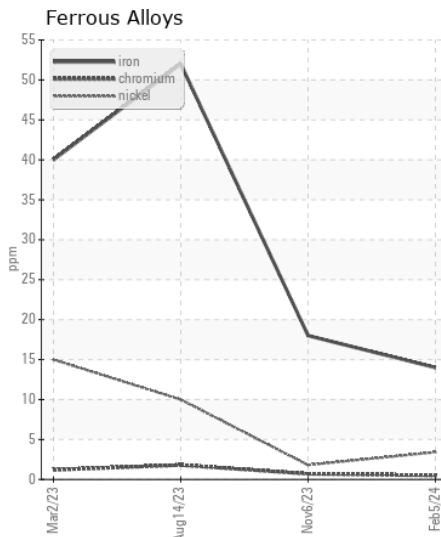
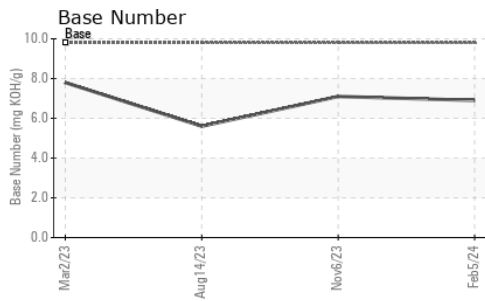
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	14
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	3	0
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	>4	<b>0.7</b>	0.8	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	9.3	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	21.5	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 suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	4	7
Boron	ppm	ASTM D5185m	0	<b>3</b>	0	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	60	70
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m	1010	<b>997</b>	951	1063
Calcium	ppm	ASTM D5185m	1070	<b>1071</b>	1059	1202
Phosphorus	ppm	ASTM D5185m	1150	<b>1072</b>	947	998
Zinc	ppm	ASTM D5185m	1270	<b>1335</b>	1273	1292
Sulfur	ppm	ASTM D5185m	2060	<b>2798</b>	2398	2545
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.6</b>	18.1	20.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.9</b>	7.1	5.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	14.0	13.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0104557  
**Lab Number** : 06105086  
**Unique Number** : 10903316  
**Test Package** : FLEET

**Received** : 29 Feb 2024  
**Tested** : 01 Mar 2024  
**Diagnosed** : 01 Mar 2024 - Wes Davis

**GFL Environmental - 947 - WB Horicon HC**  
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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)