



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

Machine Id  
**713025**  
 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>GFL0104887</b>	GFL0104956	GFL0088138
Sample Date		Client Info		<b>15 Mar 2024</b>	02 Feb 2024	08 Jan 2024
Machine Age	mls	Client Info		<b>14500</b>	12707	11392
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>90	<b>4</b>	17	13
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	2	1
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>0</b>	1	<1
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**

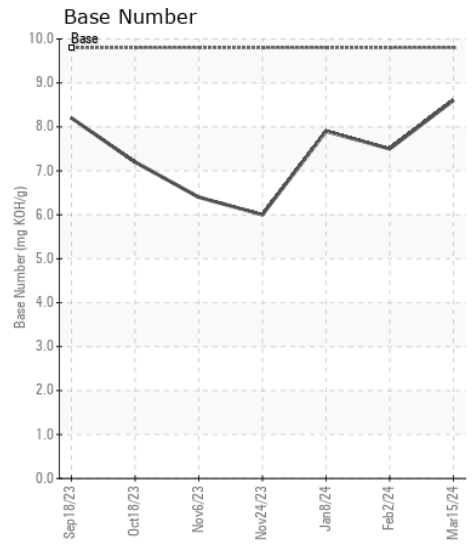
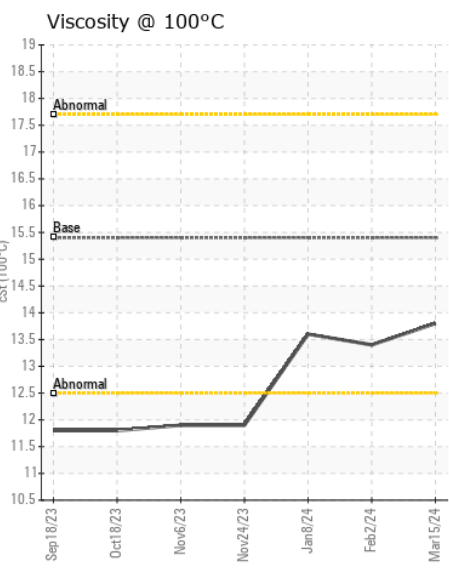
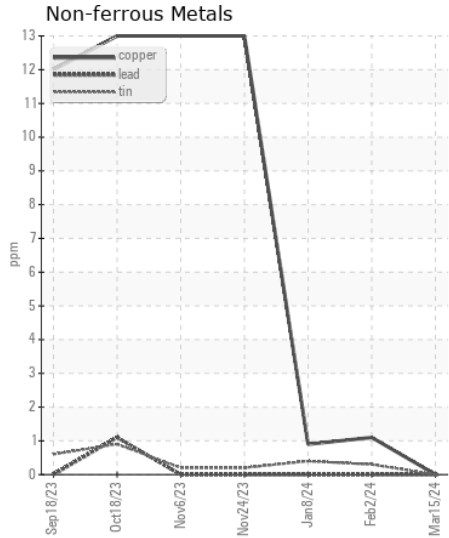
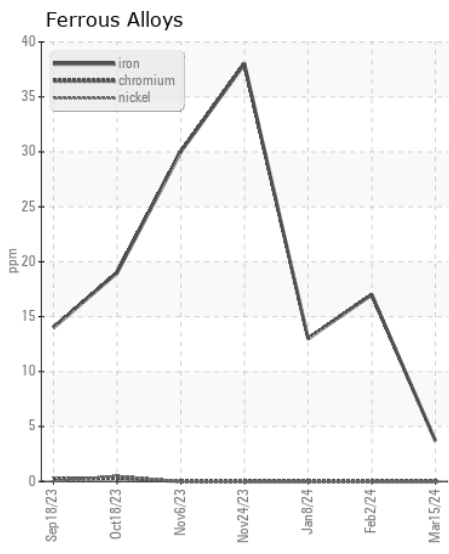
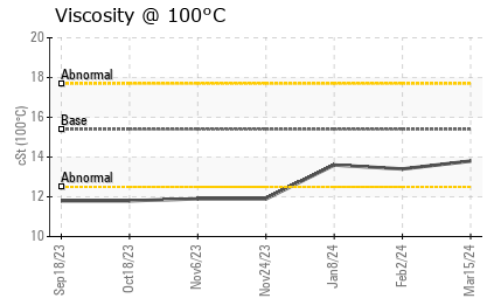
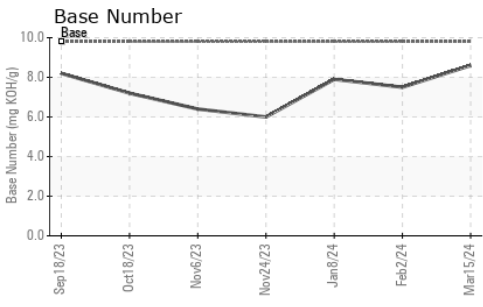
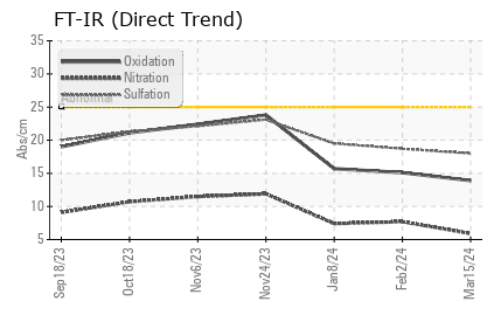
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1
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>0.2</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.9</b>	7.7	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.0</b>	18.7	19.5
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>1</b>	4	3
Boron	ppm	ASTM D5185m	0	<b>0</b>	2	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>59</b>	58	58
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>993</b>	928	1002
Calcium	ppm	ASTM D5185m	1070	<b>1137</b>	1003	1083
Phosphorus	ppm	ASTM D5185m	1150	<b>1090</b>	998	1046
Zinc	ppm	ASTM D5185m	1270	<b>1350</b>	1181	1282
Sulfur	ppm	ASTM D5185m	2060	<b>3820</b>	2865	3176
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.9</b>	15.1	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.6</b>	7.5	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	13.4	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0104887  
**Lab Number** : 06158739  
**Unique Number** : 10994162  
**Test Package** : FLEET  
**Received** : 24 Apr 2024  
**Tested** : 25 Apr 2024  
**Diagnosed** : 25 Apr 2024 - Wes Davis

**GFL Environmental - 820 - Joplin Hauling**  
 3700 West 7th Street  
 Joplin, MO  
 US 64801  
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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)