



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



Machine Id  
**923038-260199**  
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>GFL0104845</b>	GFL0067755	GFL0067763
Sample Date		Client Info		<b>18 Jan 2024</b>	06 Mar 2023	14 Feb 2023
Machine Age	hrs	Client Info		<b>21034</b>	0	0
Oil Age	hrs	Client Info		<b>16904</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>6</b>	4	37
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	2
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>4</b>	1	<b>▲ 9</b>
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	<1	4
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
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**

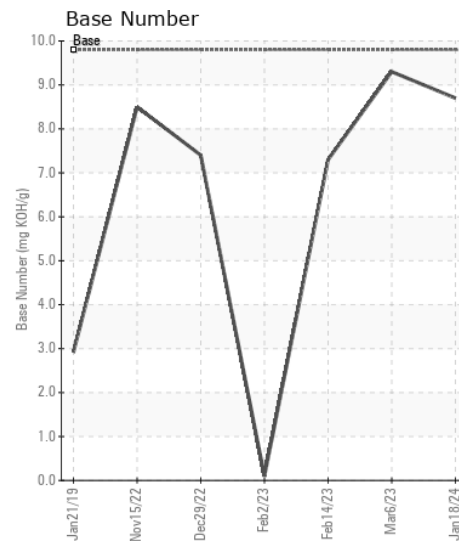
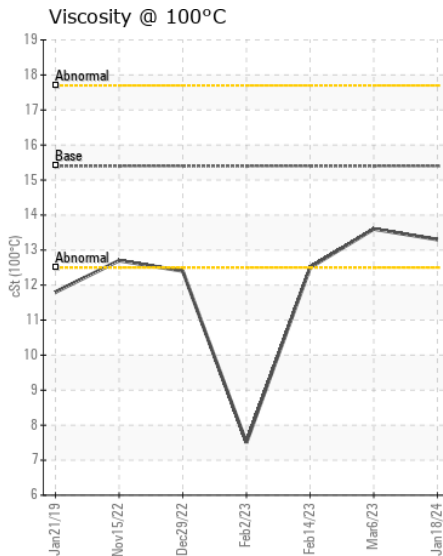
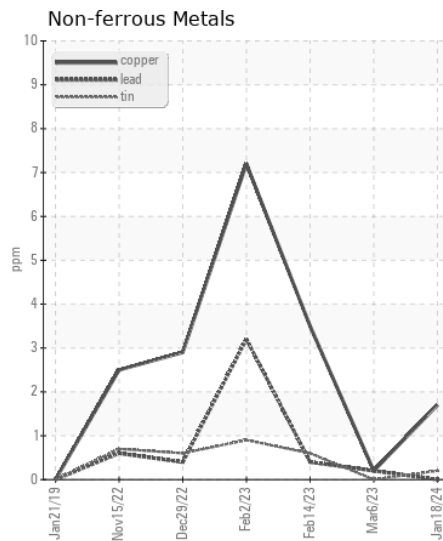
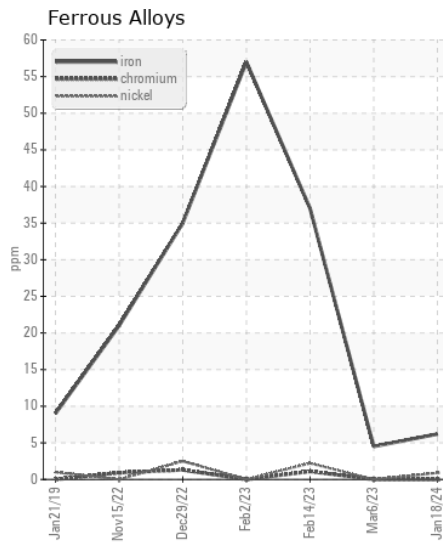
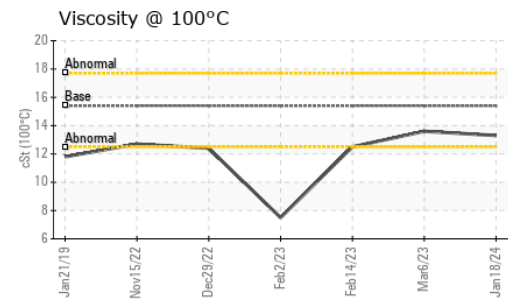
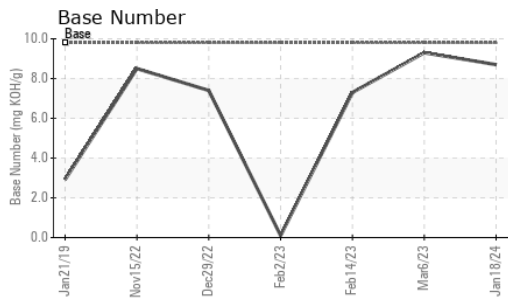
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>17</b>	6	<b>▲ 28</b>
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	6
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>0.3</b>	0.3	1.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.2</b>	5.4	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.7</b>	17.6	20.4
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>2</b>	2	5
Boron	ppm	ASTM D5185m	0	<b>7</b>	3	3
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>53</b>	58	54
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>853</b>	913	712
Calcium	ppm	ASTM D5185m	1070	<b>932</b>	1086	1103
Phosphorus	ppm	ASTM D5185m	1150	<b>953</b>	992	914
Zinc	ppm	ASTM D5185m	1270	<b>1174</b>	1255	1087
Sulfur	ppm	ASTM D5185m	2060	<b>2869</b>	3510	2743
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.3</b>	12.8	14.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.7</b>	9.3	7.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	13.6	12.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0104845 **Recieved** : 30 Jan 2024  
**Lab Number** : 06074406 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10856497 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 820 - Joplin Hauling**  
 3700 West 7th Street  
 Joplin, MO  
 US 64801  
 Contact: James Jarrett  
 jjarrett@gflenv.com  
 T: (417)310-2802  
 F:

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)