



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



Machine Id  
**723033-303003**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0108107</b>	GFL0102466	GFL0078562
Sample Date		Client Info		<b>30 Jan 2024</b>	08 Jan 2024	14 Jun 2023
Machine Age	hrs	Client Info		<b>0</b>	21063	20474
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>13</b>	8	58
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	2
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	<1	5
Lead	ppm	ASTM D5185m	>30	<b>1</b>	2	<1
Copper	ppm	ASTM D5185m	>150	<b>7</b>	13	<1
Tin	ppm	ASTM D5185m	>5	<b>1</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**

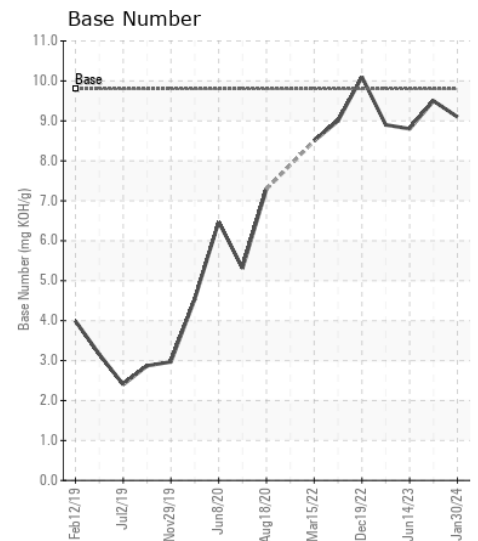
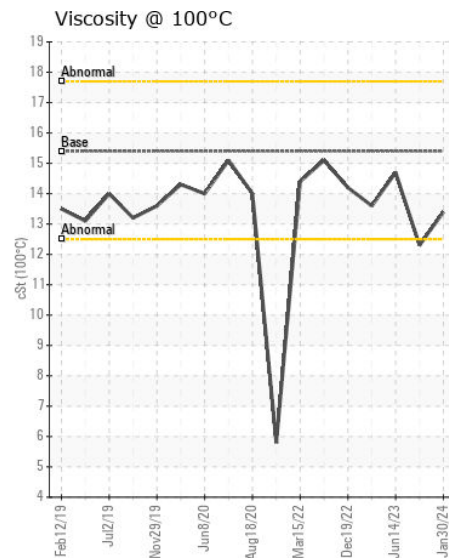
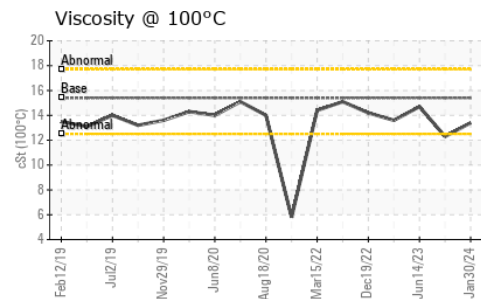
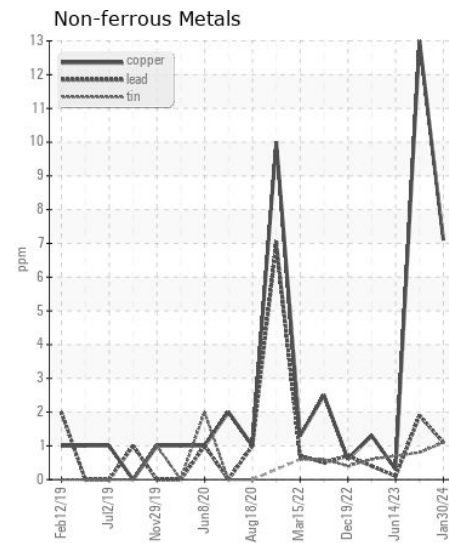
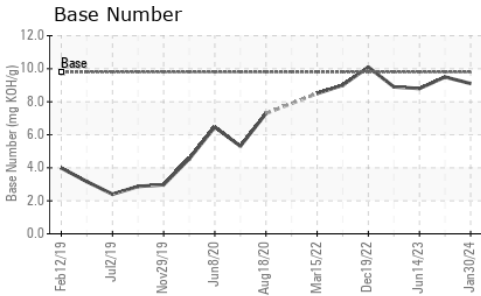
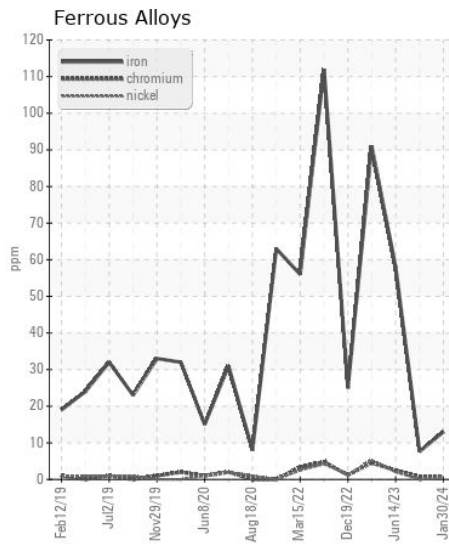
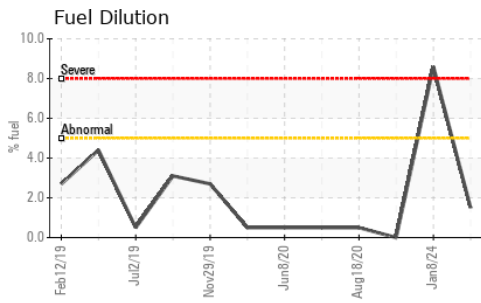
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>10</b>	20	12
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	2
Fuel	%	ASTM D3524	>5	<b>1.5</b>	▲ 8.6	<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>0.2</b>	0.1	1.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.6</b>	4.7	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.1</b>	17.7	24.1
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>0</b>	2	21
Boron	ppm	ASTM D5185m	0	<b>2</b>	12	4
Barium	ppm	ASTM D5185m	0	<b>16</b>	6	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	57	58
Manganese	ppm	ASTM D5185m	0	<b>2</b>	4	<1
Magnesium	ppm	ASTM D5185m	1010	<b>878</b>	907	970
Calcium	ppm	ASTM D5185m	1070	<b>1059</b>	1128	1041
Phosphorus	ppm	ASTM D5185m	1150	<b>955</b>	1059	993
Zinc	ppm	ASTM D5185m	1270	<b>1178</b>	1224	1209
Sulfur	ppm	ASTM D5185m	2060	<b>3356</b>	3158	3438
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.8</b>	13.5	20.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.1</b>	9.5	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	▲ 12.3	14.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0108107 **Received** : 12 Feb 2024  
**Lab Number** : 06086533 **Tested** : 14 Feb 2024  
**Unique Number** : 10873978 **Diagnosed** : 14 Feb 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

**GFL Environmental - 837 - Harrison TS**  
 22820 S State Route 291  
 Harrisonville, MO  
 US 64701  
 Contact: JOHNNY PEREZ  
 johnny.perez@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)

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F: