



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

Machine Id  
**948007-205265**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (28 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0092158</b>	GFL0084643	GFL0084713
Sample Date		Client Info		<b>12 Feb 2024</b>	15 Oct 2023	13 Jun 2023
Machine Age	mls	Client Info		<b>147227</b>	0	0
Oil Age	mls	Client Info		<b>470</b>	0	0
Filter Age	mls	Client Info		<b>470</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
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	>100	<b>14</b>	8	8
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	4
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	0
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
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**

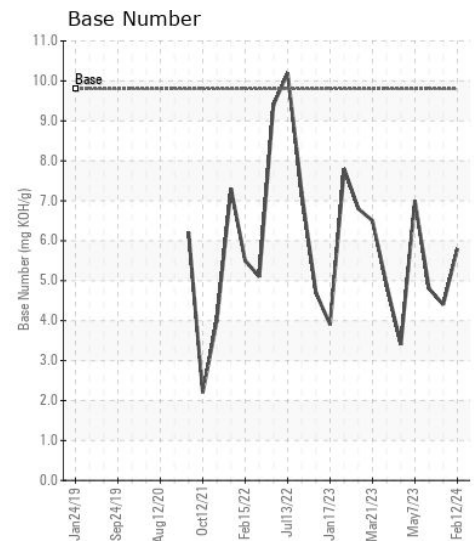
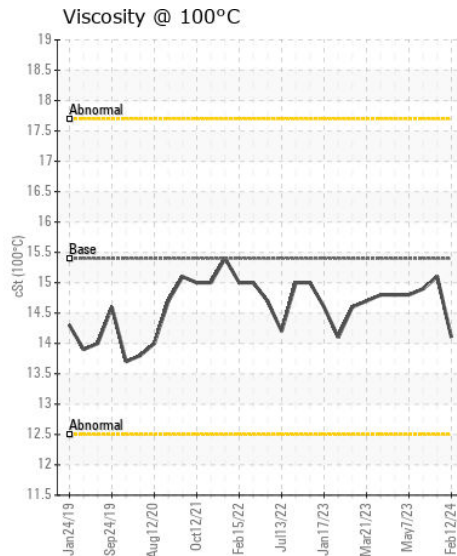
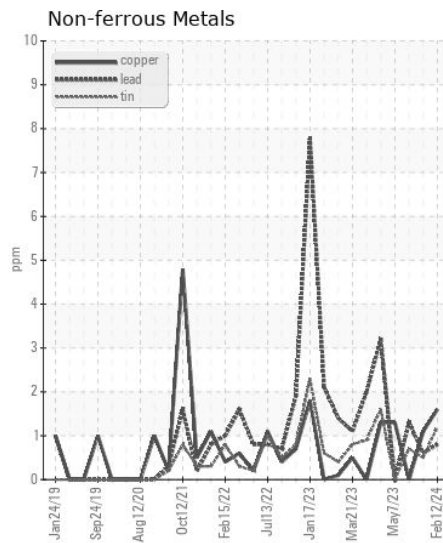
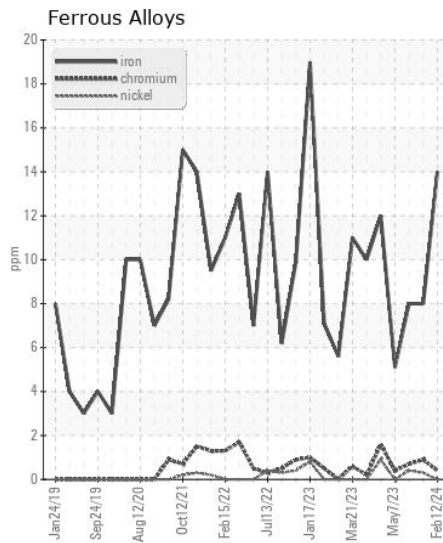
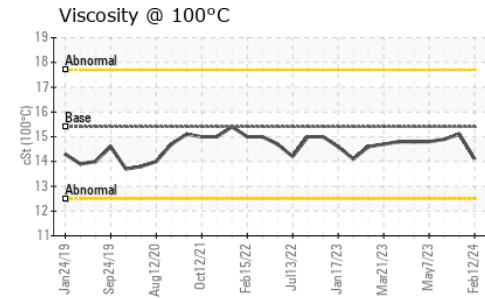
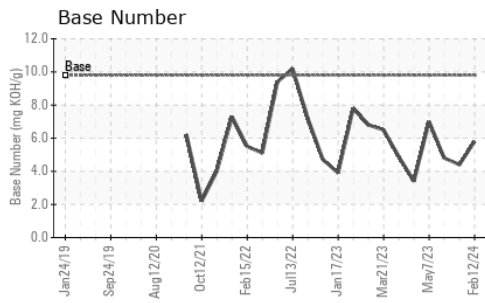
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>15</b>	5	8
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	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</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.8</b>	10.6	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.9</b>	21.5	21.3
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>3</b>	9	22
Boron	ppm	ASTM D5185m	0	<b>14</b>	7	9
Barium	ppm	ASTM D5185m	0	<b>7</b>	3	0
Molybdenum	ppm	ASTM D5185m	60	<b>48</b>	51	50
Manganese	ppm	ASTM D5185m	0	<b>3</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>757</b>	514	580
Calcium	ppm	ASTM D5185m	1070	<b>1222</b>	1517	1690
Phosphorus	ppm	ASTM D5185m	1150	<b>715</b>	619	722
Zinc	ppm	ASTM D5185m	1270	<b>927</b>	830	1004
Sulfur	ppm	ASTM D5185m	2060	<b>2463</b>	2049	2992
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.3</b>	18.6	19.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.8</b>	4.4	4.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	15.1	14.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092158  
**Lab Number** : 06089340  
**Unique Number** : 10876785  
**Test Package** : FLEET

**Received** : 14 Feb 2024  
**Tested** : 15 Feb 2024  
**Diagnosed** : 15 Feb 2024 - Wes Davis

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Jose Gonzalez  
 jgonzalez2@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: