



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

Machine Id  
**814050**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0107952</b>	GFL0102575	GFL0102559
Sample Date		Client Info		<b>09 Jan 2024</b>	19 Dec 2023	12 Dec 2023
Machine Age	hrs	Client Info		<b>732</b>	598	555
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 Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>110	<b>&lt;1</b>	37	33
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	36	34
Lead	ppm	ASTM D5185m	>45	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>85	<b>&lt;1</b>	14	12
Tin	ppm	ASTM D5185m	>4	<b>0</b>	1	<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**

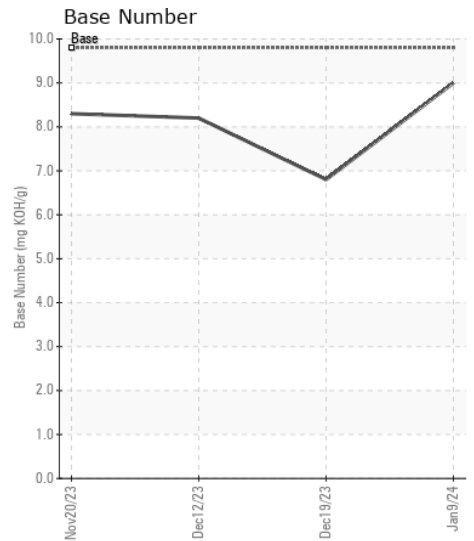
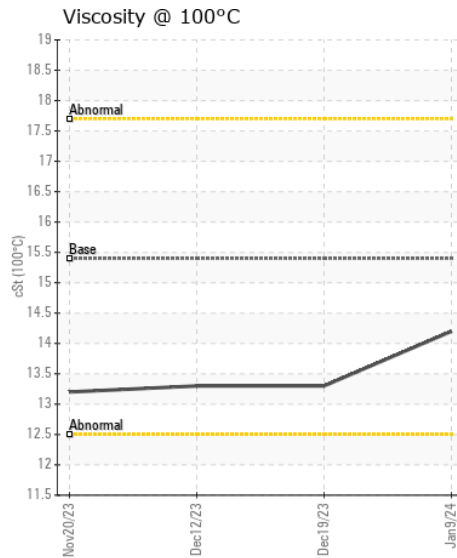
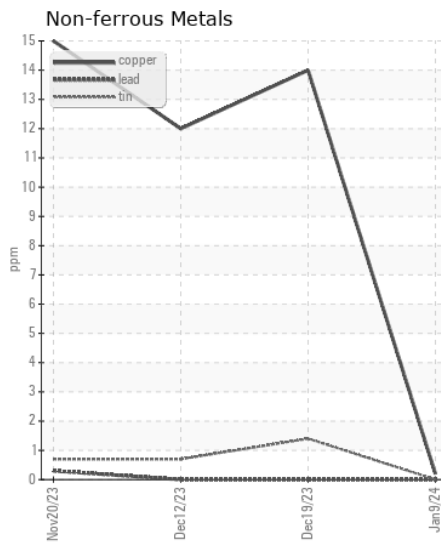
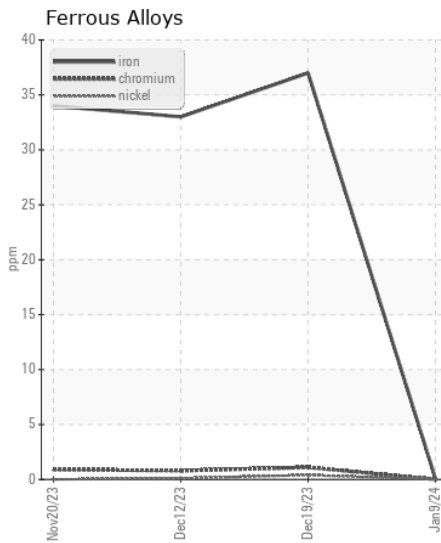
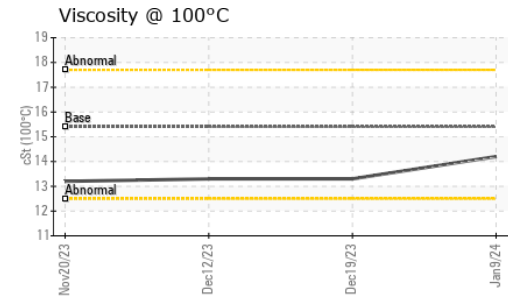
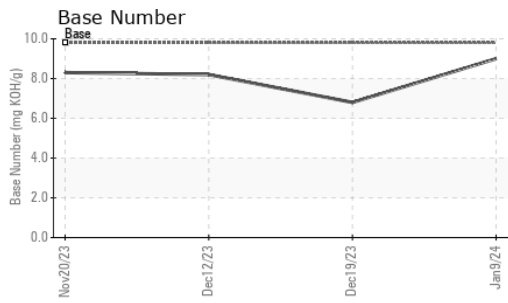
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>2</b>	20	20
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	99	88
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>0.1</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.9</b>	8.6	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.5</b>	23.0	23.4
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>1</b>	4	2
Boron	ppm	ASTM D5185m	0	<b>6</b>	211	211
Barium	ppm	ASTM D5185m	0	<b>0</b>	5	1
Molybdenum	ppm	ASTM D5185m	60	<b>56</b>	113	110
Manganese	ppm	ASTM D5185m	0	<b>0</b>	5	5
Magnesium	ppm	ASTM D5185m	1010	<b>955</b>	733	730
Calcium	ppm	ASTM D5185m	1070	<b>1031</b>	1478	1416
Phosphorus	ppm	ASTM D5185m	1150	<b>985</b>	785	719
Zinc	ppm	ASTM D5185m	1270	<b>1277</b>	907	883
Sulfur	ppm	ASTM D5185m	2060	<b>3061</b>	2637	2483
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.5</b>	19.3	19.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.0</b>	6.8	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.2</b>	13.3	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0107952 **Received** : 11 Jan 2024  
**Lab Number** : 06057690 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10823639 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 892 - Pauls Valley Hauling**  
 405 East Airport Industrial Road  
 Pauls Valley, OK  
 US 73075  
 Contact: Tony Graham  
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 T:  
 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)