



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

Area  
**(YA154655)**  
Machine Id  
**2856C**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (8 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0099838</b>	GFL0099827	GFL0080526
Sample Date		Client Info		<b>10 Feb 2024</b>	19 Dec 2023	17 Oct 2023
Machine Age	hrs	Client Info		<b>12975</b>	12482	5169
Oil Age	hrs	Client Info		<b>600</b>	1082	5169
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>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	<b>14</b>	1	5
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<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>2</b>	1	2
Lead	ppm	ASTM D5185m	>150	<b>5</b>	1	8
Copper	ppm	ASTM D5185m	>90	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m	>5	<b>0</b>	2	0
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**

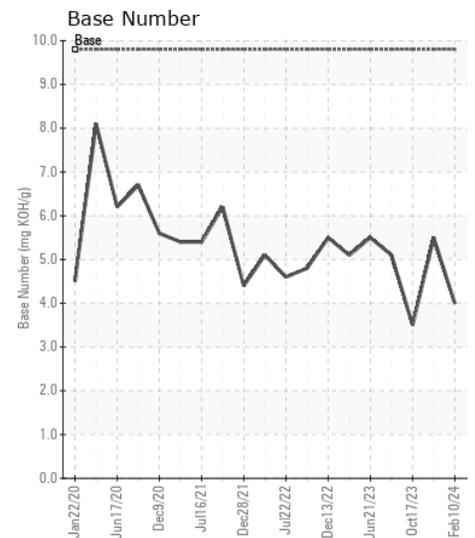
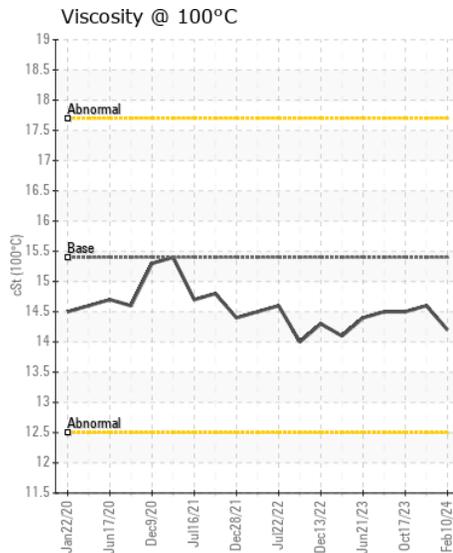
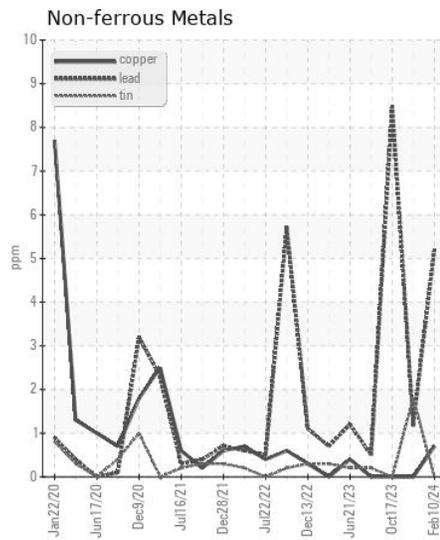
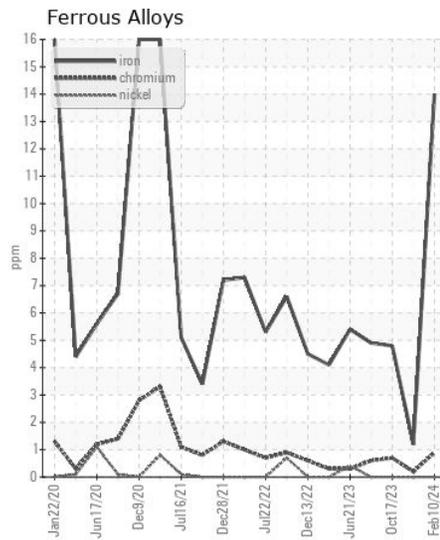
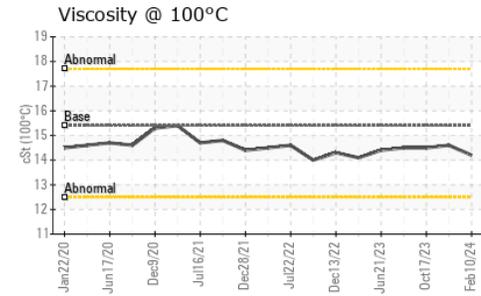
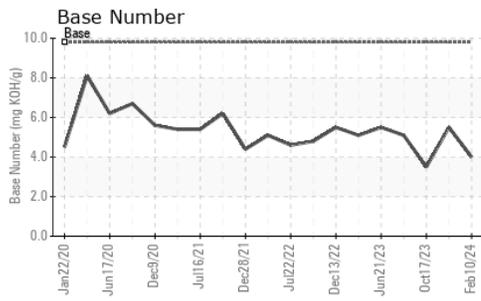
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	<b>9</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	81	0
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>	0.0	NEG
Soot %	%	*ASTM D7844	>7.5	<b>0.1</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.1</b>	10.7	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.6</b>	21.0	24.3
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>9</b>	7	6
Boron	ppm	ASTM D5185m	0	<b>14</b>	14	8
Barium	ppm	ASTM D5185m	0	<b>9</b>	0	<1
Molybdenum	ppm	ASTM D5185m	60	<b>81</b>	46	52
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>851</b>	537	595
Calcium	ppm	ASTM D5185m	1070	<b>2326</b>	1490	1562
Phosphorus	ppm	ASTM D5185m	1150	<b>1004</b>	748	765
Zinc	ppm	ASTM D5185m	1270	<b>1442</b>	1003	996
Sulfur	ppm	ASTM D5185m	2060	<b>3900</b>	2437	2397
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.8</b>	17.9	20.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>4.0</b>	5.5	▲ 3.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.2</b>	14.6	14.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0099838  
**Lab Number** : 06088543  
**Unique Number** : 10875988  
**Test Package** : FLEET

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

**GFL Environmental - 018 - Fayetteville**  
 4621 Marracco Drive  
 Hope Mills, NC  
 US 28348

Contact: Robert Carter  
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 T: (910)596-1170

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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