



Machine Id  
**11001M**  
 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>GFL0041809</b>	GFL0041843	GFL0016717
Sample Date		Client Info		<b>27 Jul 2023</b>	03 Jun 2023	03 Dec 2021
Machine Age	hrs	Client Info		<b>473000</b>	473000	473000
Oil Age	hrs	Client Info		<b>600</b>	600	0
Filter Age	hrs	Client Info		<b>600</b>	600	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**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>6</b>	19	29
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	8	2
Copper	ppm	ASTM D5185m	>330	<b>15</b>	1	4
Tin	ppm	ASTM D5185m	>15	<b>2</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**

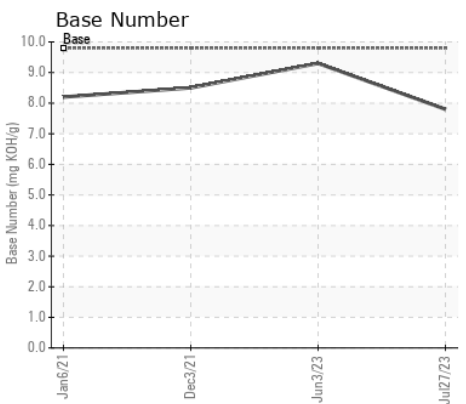
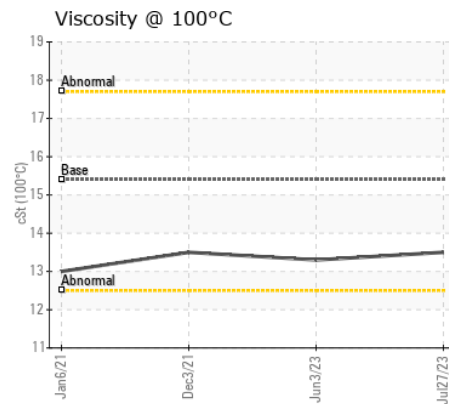
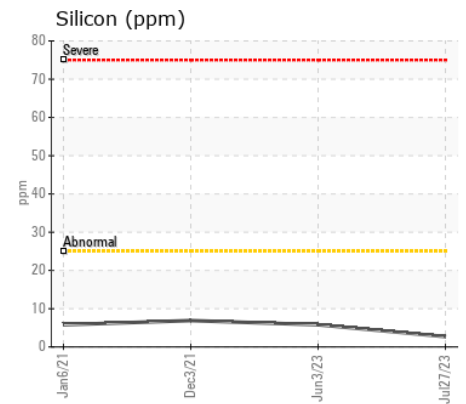
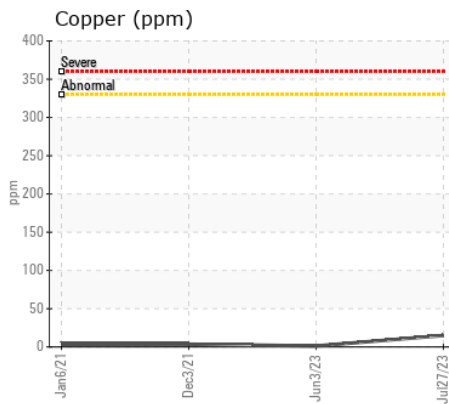
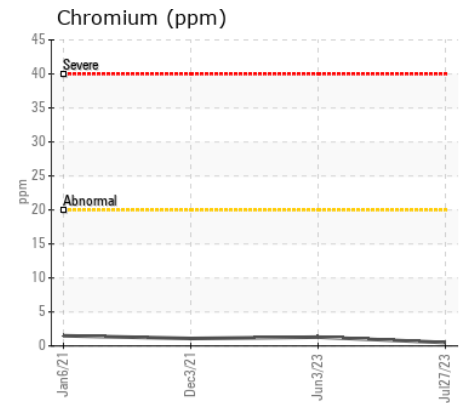
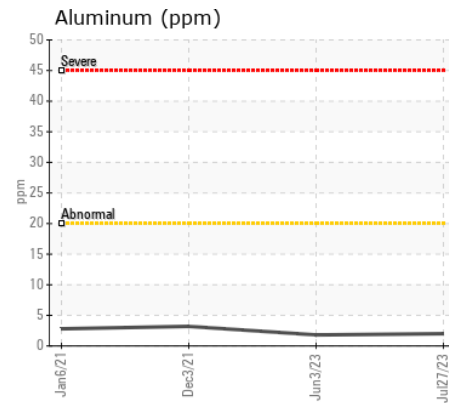
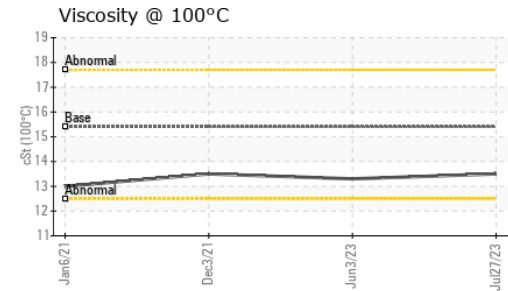
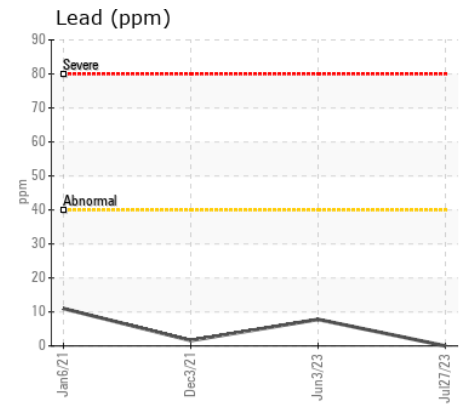
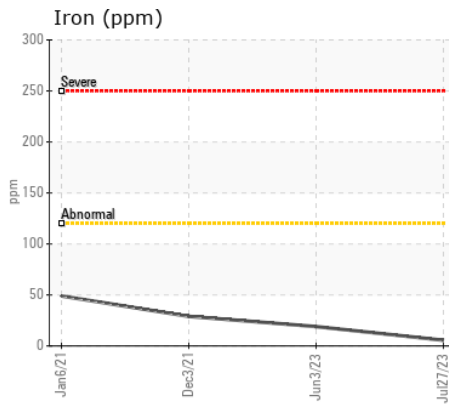
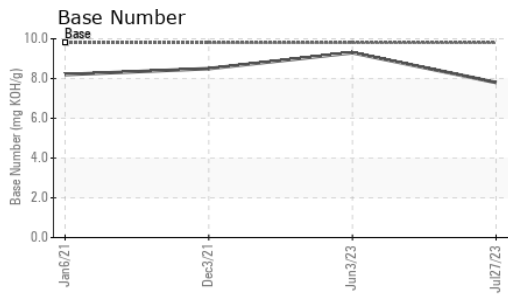
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	6	7
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	6	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>0.1</b>	0.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	8.7	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.8</b>	20.3	22.9
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>&lt;1</b>	4	3
Boron	ppm	ASTM D5185m	0	<b>5</b>	4	59
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>64</b>	63	64
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>944</b>	1028	1085
Calcium	ppm	ASTM D5185m	1070	<b>1033</b>	1137	1054
Phosphorus	ppm	ASTM D5185m	1150	<b>1031</b>	1086	1134
Zinc	ppm	ASTM D5185m	1270	<b>1242</b>	1359	1260
Sulfur	ppm	ASTM D5185m	2060	<b>2641</b>	3835	2819
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.5</b>	16.8	21.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.8</b>	9.3	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.5</b>	13.3	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0041809 **Received** : 16 Jan 2024  
**Lab Number** : 06060769 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832151 **Diagnostician** : Wes Davis  
**Test Package** : MOB1+

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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)