



Machine Id  
**501138**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- LTR)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0102643</b>	GFL0093887	GFL0085937
Sample Date		Client Info		<b>07 Jan 2024</b>	06 Oct 2023	08 Jun 2023
Machine Age	hrs	Client Info		<b>14002</b>	13400	12540
Oil Age	hrs	Client Info		<b>0</b>	0	200
Filter Age	hrs	Client Info		<b>0</b>	0	200
Oil Changed		Client Info		<b>N/A</b>	N/A	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	SEVERE

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>24</b>	10	9
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	1	1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>6</b>	2	3
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

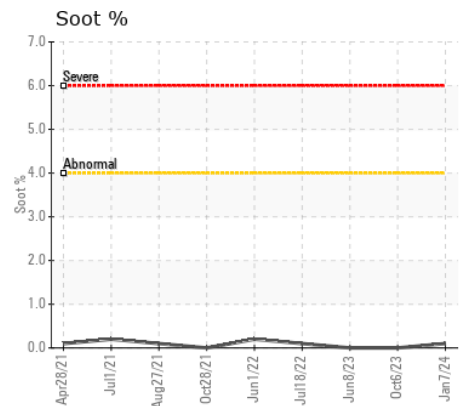
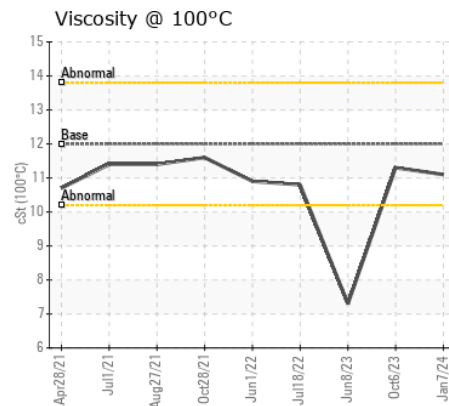
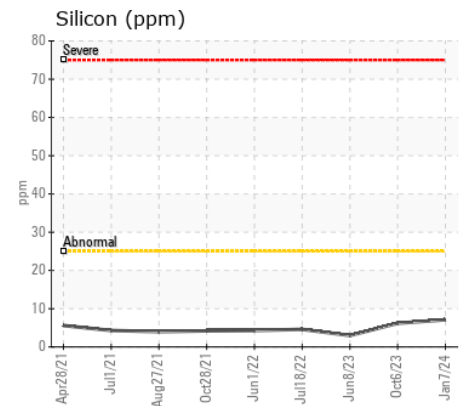
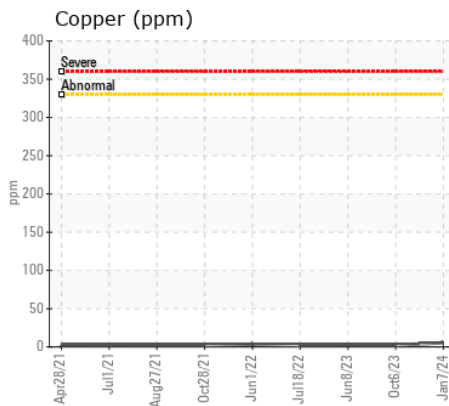
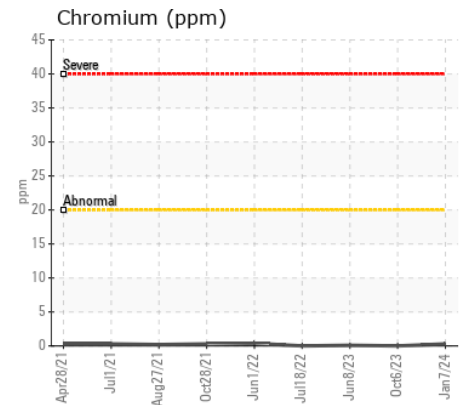
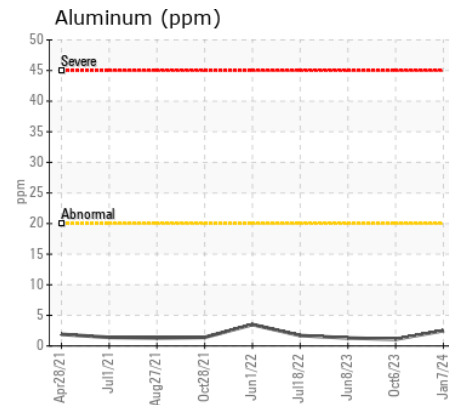
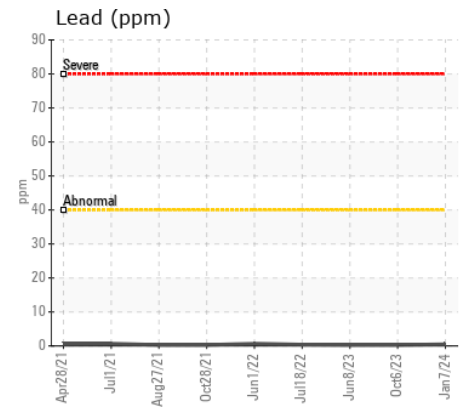
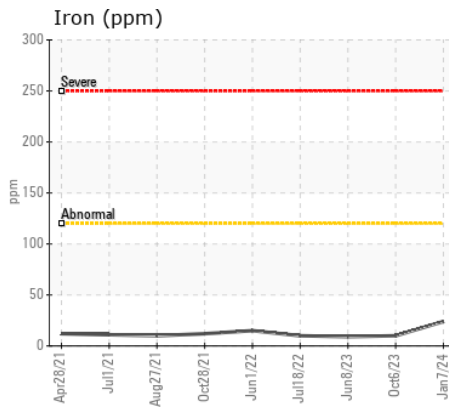
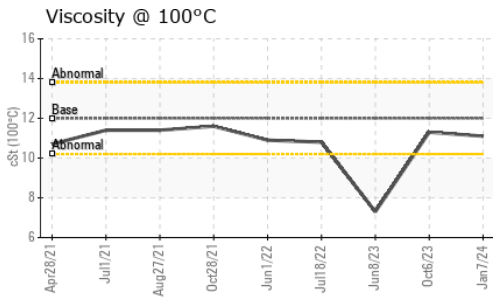
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	6	3
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	1	12
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	0.9	19.5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	0.0
Soot %	%	ASTM D7844*	>4	<b>0.1</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.6</b>	7.0	5.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.9</b>	19.3	20.0
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>10</b>	6	29
Boron	ppm	ASTM D5185(m)	2	<b>2</b>	2	1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>59</b>	59	47
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>968</b>	971	745
Calcium	ppm	ASTM D5185(m)	1050	<b>1065</b>	1053	795
Phosphorus	ppm	ASTM D5185(m)	995	<b>994</b>	984	829
Zinc	ppm	ASTM D5185(m)	1180	<b>1180</b>	1182	908
Sulfur	ppm	ASTM D5185(m)	2600	<b>2595</b>	2501	2065
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.5</b>	15.7	19.0
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.1</b>	11.3	7.3



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0102643 **Received** : 22 Jan 2024  
**Lab Number** : 02610163 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 5711249 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

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