



Machine Id  
**401174**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0090398</b>	GFL0090385	GFL0071477
Sample Date		Client Info		<b>14 Feb 2024</b>	04 Dec 2023	21 Sep 2023
Machine Age	hrs	Client Info		<b>234325</b>	226631	217627
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>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>7</b>	13	6
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	1	<1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	3	2
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	2	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

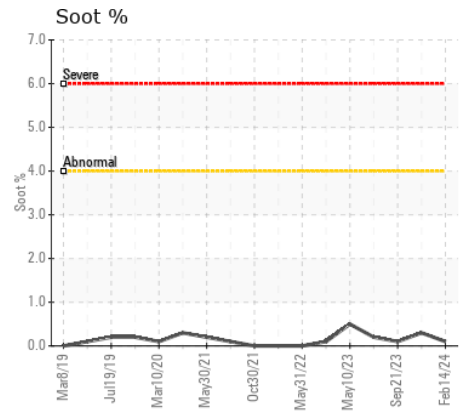
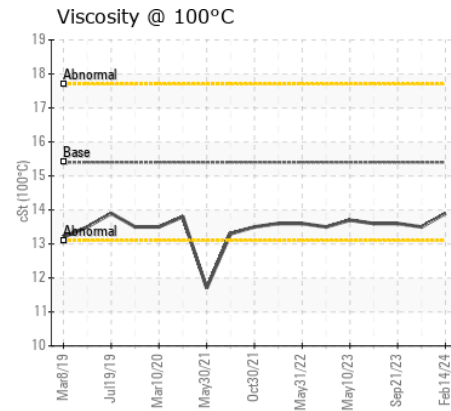
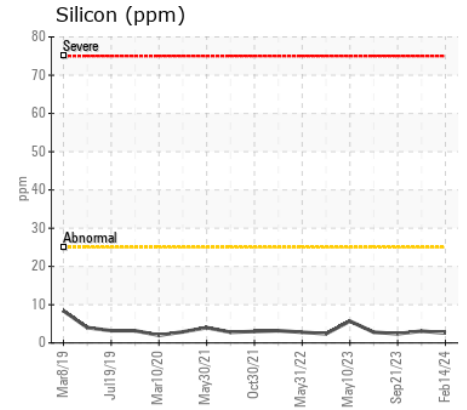
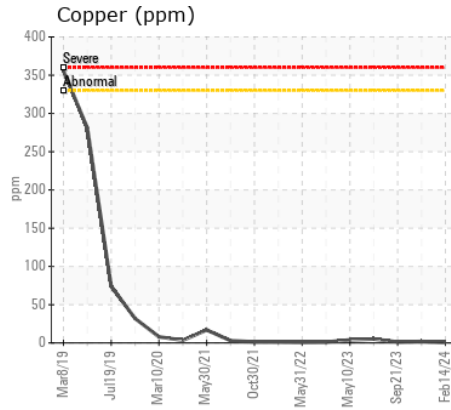
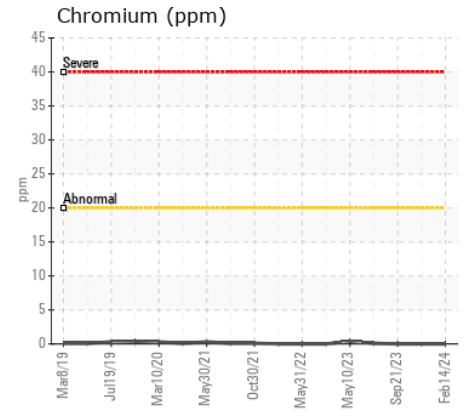
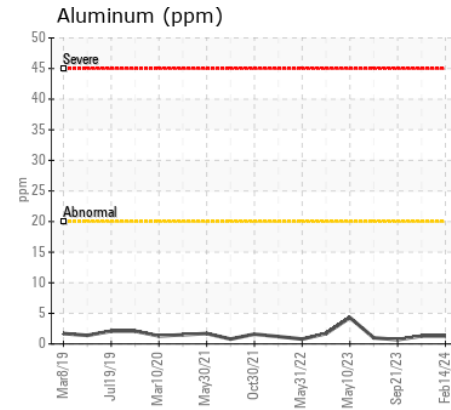
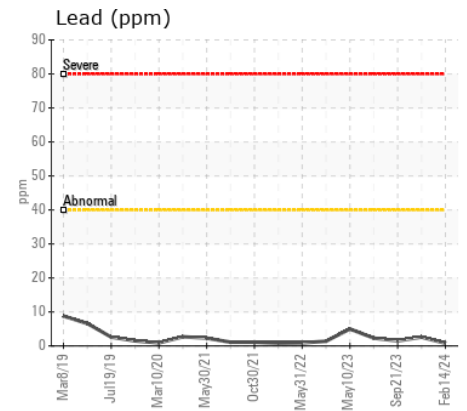
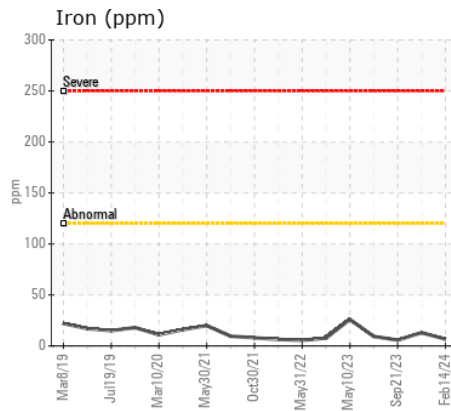
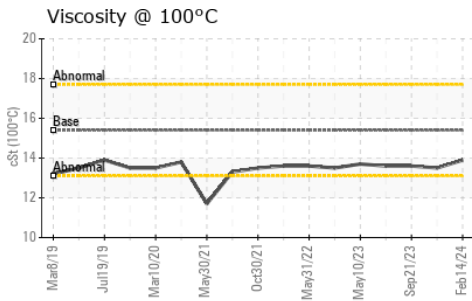
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
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>	0.3	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.3</b>	8.9	6.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.9</b>	20.9	18.9
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>3</b>	5	3
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>57</b>	60	59
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>948</b>	962	954
Calcium	ppm	ASTM D5185(m)	1070	<b>1036</b>	1037	1033
Phosphorus	ppm	ASTM D5185(m)	1150	<b>954</b>	951	988
Zinc	ppm	ASTM D5185(m)	1270	<b>1142</b>	1177	1169
Sulfur	ppm	ASTM D5185(m)	2060	<b>2528</b>	2219	2389
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.0</b>	17.5	14.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.9</b>	13.5	13.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0090398 **Received** : 28 Feb 2024  
**Lab Number** : 02618585 **Tested** : 28 Feb 2024  
**Unique Number** : 5735695 **Diagnosed** : 28 Feb 2024 - Wes Davis  
**Test Package** : MOB 1

**GFL Environmental - 216M**  
 2475 Beryl Drive  
 Oakville, ON  
 CA L6J 7X4  
 Contact: Matthew Guinness  
 mgunness@gflenv.com

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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F: