

Machine Id  
**424074**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0117279</b>	GFL0099611	GFL0077634
Sample Date		Client Info		<b>29 May 2024</b>	29 Jan 2024	20 Jun 2023
Machine Age	hrs	Client Info		<b>2424</b>	1946	1076
Oil Age	hrs	Client Info		<b>479</b>	638	0
Filter Age	hrs	Client Info		<b>479</b>	638	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	<b>19</b>	20	33
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	<b>2</b>	3	3
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

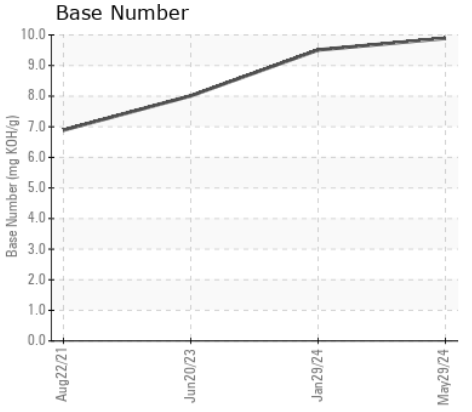
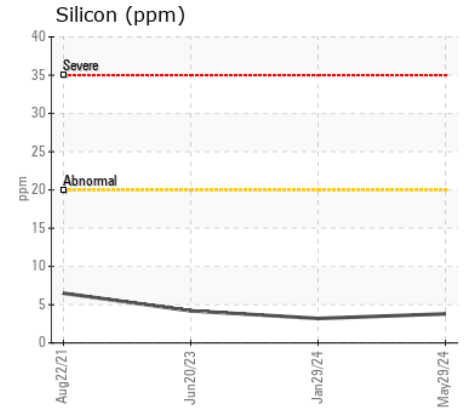
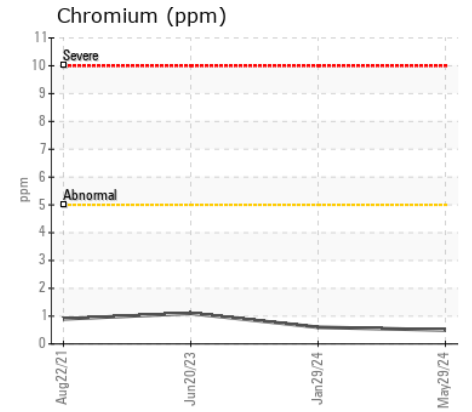
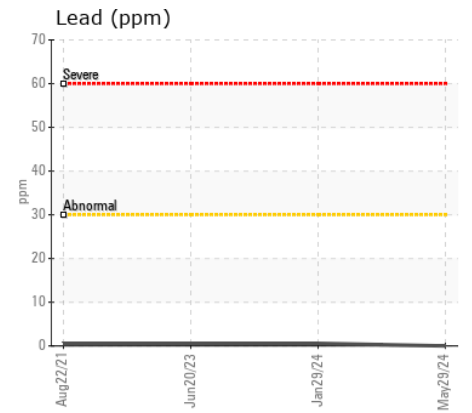
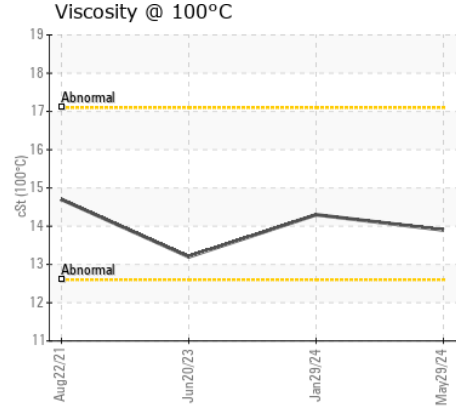
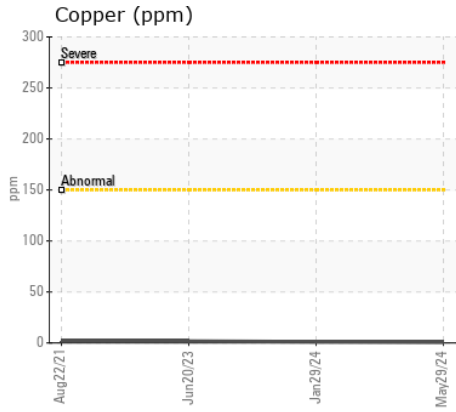
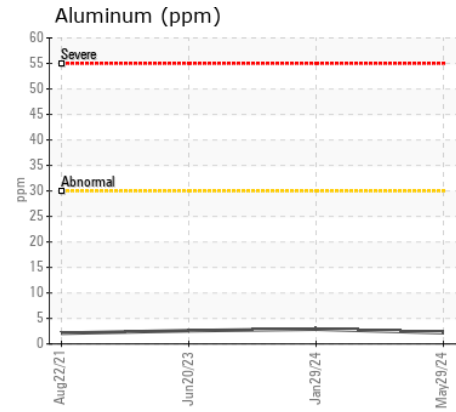
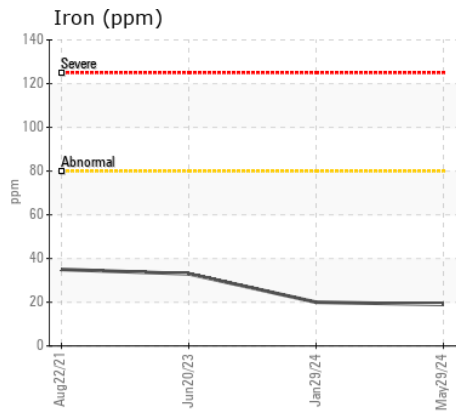
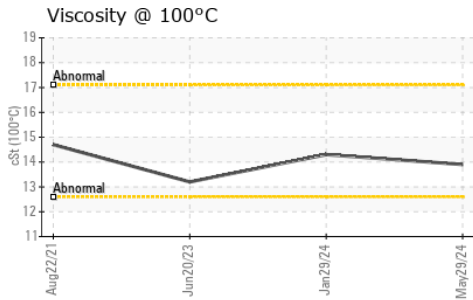
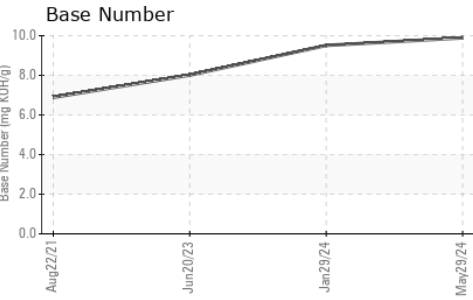
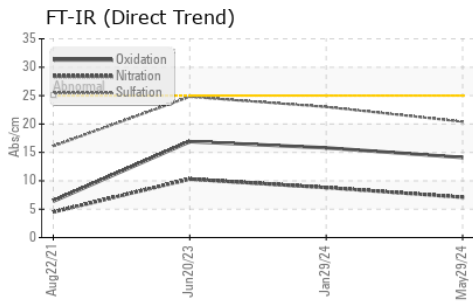
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>4</b>	3	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
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>1.2</b>	2	2.8
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.1</b>	8.8	10.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.4</b>	23.0	24.8
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 D5185(m)		<b>2</b>	2	2
Boron	ppm	ASTM D5185(m)		<b>5</b>	3	3
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>56</b>	56	56
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>899</b>	898	897
Calcium	ppm	ASTM D5185(m)		<b>1017</b>	1071	1010
Phosphorus	ppm	ASTM D5185(m)		<b>945</b>	956	999
Zinc	ppm	ASTM D5185(m)		<b>1126</b>	1114	1129
Sulfur	ppm	ASTM D5185(m)		<b>2366</b>	2500	2265
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.1</b>	15.8	16.9
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>9.89</b>	9.51	8.01
Visc @ 100°C	cSt	ASTM D7279(m)		<b>13.9</b>	14.3	13.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0117279  
**Lab Number** : 02641071  
**Unique Number** : 5798610  
**Test Package** : MOB 2  
**Received** : 11 Jun 2024  
**Tested** : 11 Jun 2024  
**Diagnosed** : 11 Jun 2024 - Wes Davis

**GFL Environmental - 550 - Rocky View County**  
 220 Carmek Blvd  
 Rocky View County, AB  
 CA T1X 1X1  
 Contact: GFL Calgary  
 calgarymaintenance@gflenv.com  
 T: (403)369-6163

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.