



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



Area  
**GFL2160**  
Machine Id  
**421033**  
Component  
**Diesel Engine**  
Fluid  
**CHEVRON DELO 400 LE 15W40 (--- GAL)**

**RECOMMENDATION**

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0121948</b>	GFL0099667	GFL0093782
Sample Date		Client Info		<b>01 May 2024</b>	17 Nov 2023	12 Sep 2023
Machine Age	kms	Client Info		<b>329183</b>	289457	271373
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	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 D5185(m)	>200	<b>22</b>	9	17
Chromium	ppm	ASTM D5185(m)	>6	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	<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)	>50	<b>5</b>	10	6
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>50	<b>14</b>	15	8
Tin	ppm	ASTM D5185(m)	>6	<b>&lt;1</b>	3	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

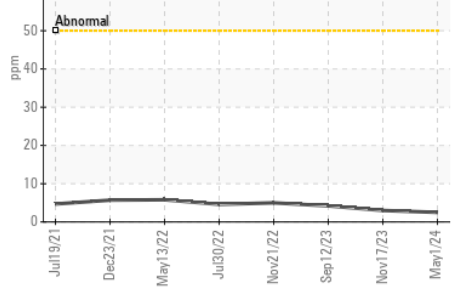
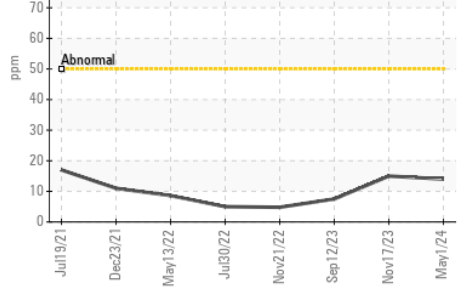
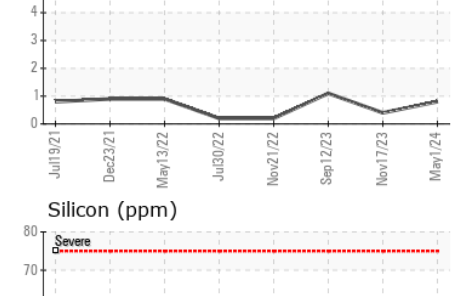
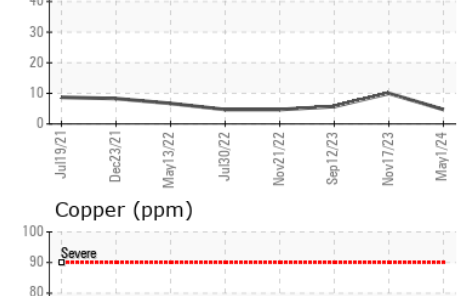
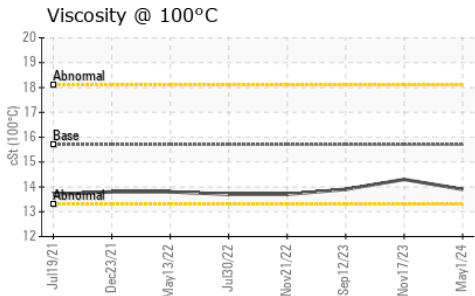
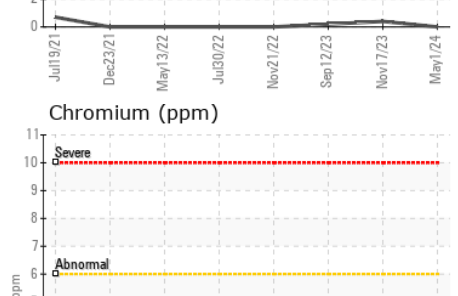
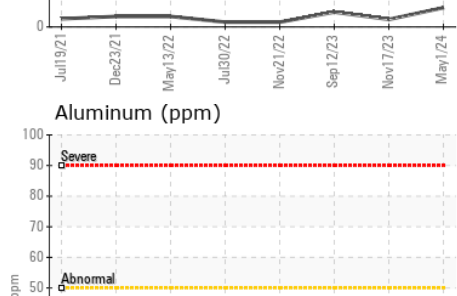
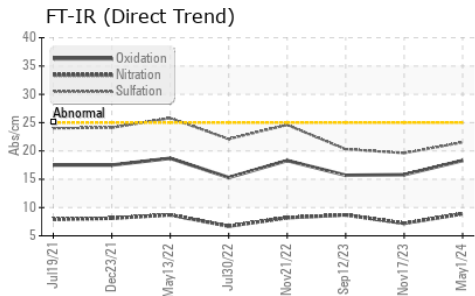
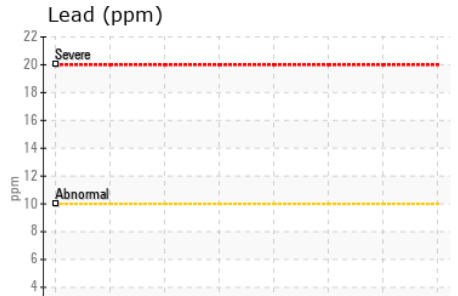
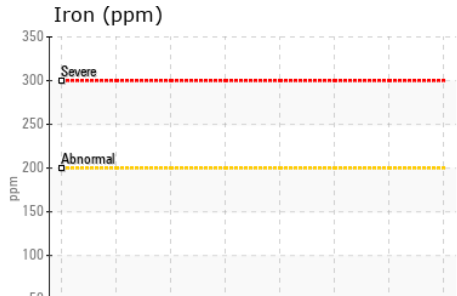
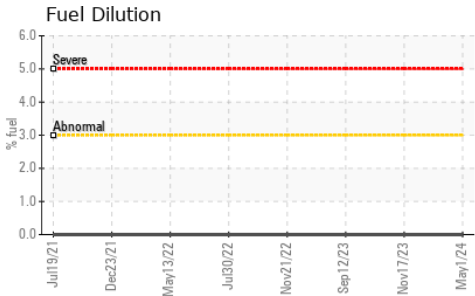
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>50	<b>2</b>	3	4
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	1	1
Fuel	%	ASTM D7593*	>3.0	<b>0.0</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>0.6</b>	0.4	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.9</b>	7.2	8.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.5</b>	19.6	20.3
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	2	4
Boron	ppm	ASTM D5185(m)		<b>3</b>	2	8
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<b>63</b>	60	64
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>1030</b>	962	946
Calcium	ppm	ASTM D5185(m)		<b>1120</b>	998	1100
Phosphorus	ppm	ASTM D5185(m)	1200	<b>963</b>	930	979
Zinc	ppm	ASTM D5185(m)	1300	<b>1249</b>	1190	1183
Sulfur	ppm	ASTM D5185(m)	3200	<b>1903</b>	2181	2383
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.3</b>	15.8	15.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	<b>13.9</b>	14.3	13.9



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0121948  
**Lab Number** : 02635536  
**Unique Number** : 5776689  
**Test Package** : MOB 1 ( Additional Tests: FUELDILUTION, PercentFuel )

**GFL Environmental - 252 - GTA Hauling**  
 3668 Weston Road  
 North York, ON  
 CA M9L 1W2  
 Contact: Amanda Cipollone  
 acipollone@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.