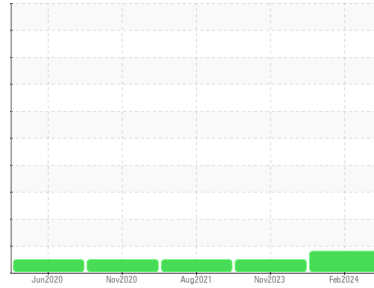




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**OR681**

Component  
**Center Swing Drive**

Fluid  
**PETRO CANADA GEARLUBE TOS 80W140 (6 LTR)**

## DIAGNOSIS

### Recommendation

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

### Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0092222</b>	GFL0092224	GFL0030461
Sample Date	Client Info		<b>09 Feb 2024</b>	16 Nov 2023	10 Aug 2021
Machine Age	hrs	Client Info	<b>10645</b>	10033	6171
Oil Age	hrs	Client Info	<b>4490</b>	1000	1000
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	N/A
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>7</b>	---	---
Iron	ppm	ASTM D5185(m) >151	<b>▲ 154</b>	145	42
Chromium	ppm	ASTM D5185(m) >11	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >21	<b>4</b>	1	<1
Lead	ppm	ASTM D5185(m) >51	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >51	<b>1</b>	1	<1
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 170	<b>67</b>	66	163
Barium	ppm	ASTM D5185(m) 4	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>2</b>	2	1
Magnesium	ppm	ASTM D5185(m) 1.0	<b>4</b>	4	<1
Calcium	ppm	ASTM D5185(m) 16	<b>21</b>	13	9
Phosphorus	ppm	ASTM D5185(m) 920	<b>547</b>	555	1038
Zinc	ppm	ASTM D5185(m) 8	<b>66</b>	59	37
Sulfur	ppm	ASTM D5185(m) 1630	<b>8490</b>	8233	18949
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

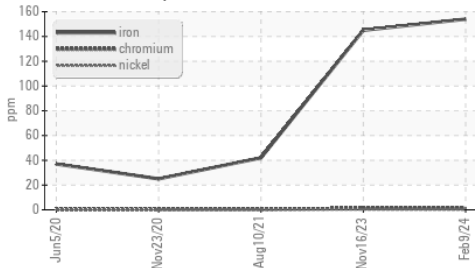
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >31	<b>16</b>	12	6
Sodium	ppm	ASTM D5185(m) >51	<b>&lt;1</b>	<1	1
Potassium	ppm	ASTM D5185(m) >20	<b>5</b>	3	<1

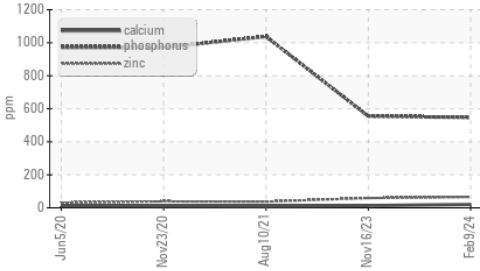


# OIL ANALYSIS REPORT

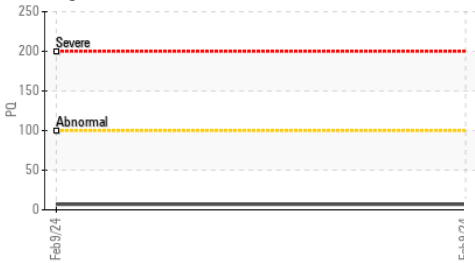
## ▲ Ferrous Alloys



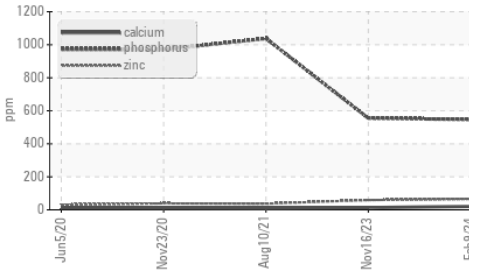
## Additives



## PQ



## Additives



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	249.3	202	209

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

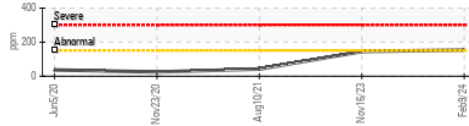


Bottom

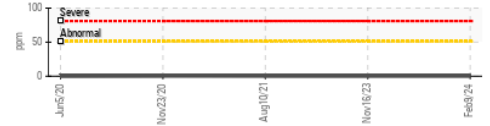


## GRAPHS

### ▲ Iron (ppm)



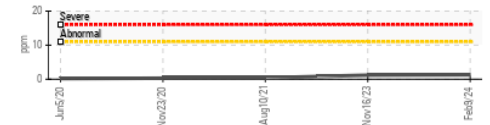
### Lead (ppm)



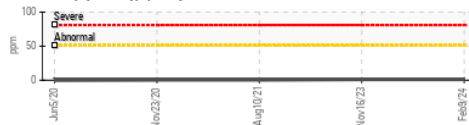
### Aluminum (ppm)



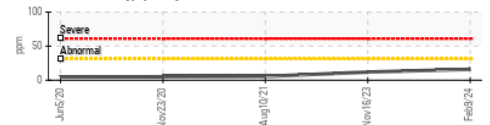
### Chromium (ppm)



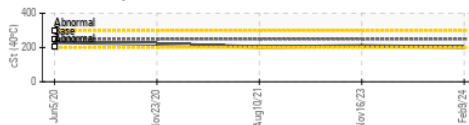
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 40°C



### PQ



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : GFL0092222  
 Lab Number : 02615459  
 Unique Number : 5724554  
 Test Package : MOB 1 ( Additional Tests: PQ )

GFL Environmental - 720 - Lafleche - Landfill  
 17125 Lafleche Road,  
 Moose Creek, ON  
 CA K0C 1W0  
 Contact: Charles Bergeron  
 cbergeron@gflenv.com  
 T: (613)538-4853  
 F:

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.