

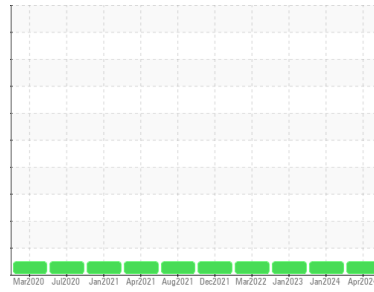


# OIL ANALYSIS REPORT



Machine Id  
**OR962**  
 Component  
**Center Transfer Gearbox**  
 Fluid  
**PETRO CANADA PRODURO TO-4 SAE 30 (9 LTR)**

### Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

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

### Wear

All component wear rates are normal.

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0113334</b>	GFL0092253	GFL0064905
Sample Date	Client Info		<b>17 Apr 2024</b>	19 Jan 2024	10 Jan 2023
Machine Age	hrs	Client Info	<b>14420</b>	13733	10932
Oil Age	hrs	Client Info	<b>11619</b>	2144	2500
Oil Changed		Client Info	<b>N/A</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >200	<b>9</b>	9	7
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185(m)	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
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

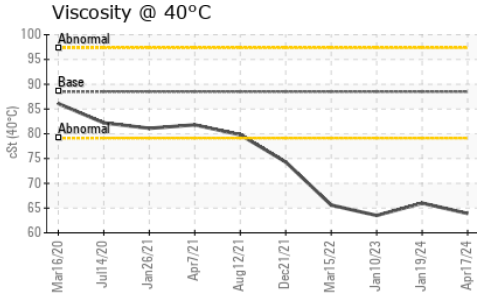
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 2	<b>25</b>	21	38
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>2</b>	3	2
Manganese	ppm	ASTM D5185(m) 9	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m) 1	<b>47</b>	47	38
Calcium	ppm	ASTM D5185(m) 3131	<b>2620</b>	2588	2384
Phosphorus	ppm	ASTM D5185(m) 1194	<b>849</b>	839	927
Zinc	ppm	ASTM D5185(m) 1281	<b>992</b>	959	954
Sulfur	ppm	ASTM D5185(m) 3811	<b>2817</b>	3275	3087
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<b>2</b>	4	2
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1



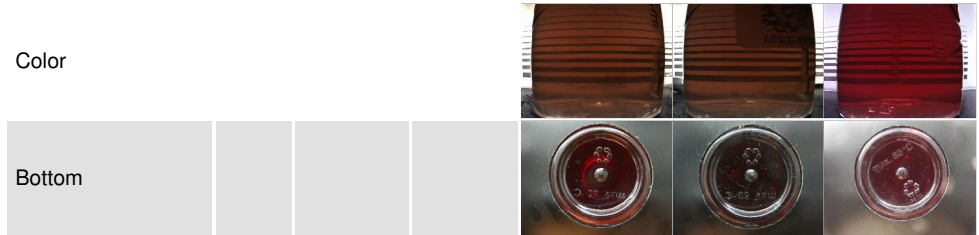
# OIL ANALYSIS REPORT



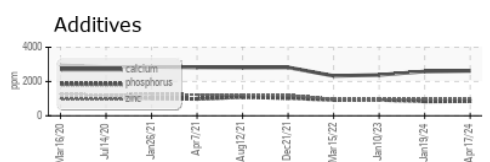
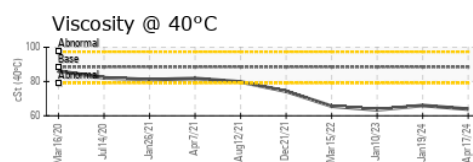
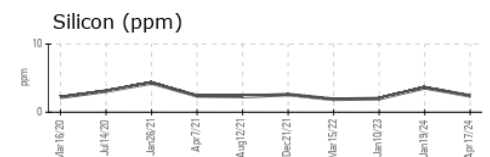
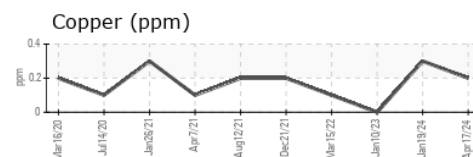
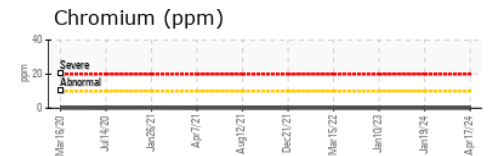
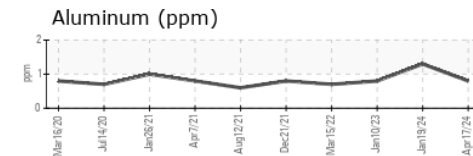
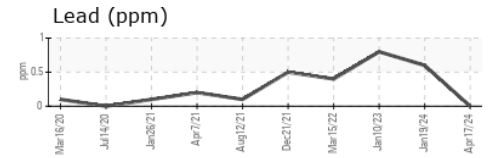
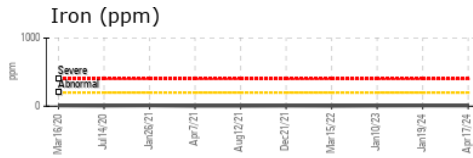
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	88.5	63.9	66.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0113334  
**Lab Number** : 02631034  
**Unique Number** : 5772187  
**Test Package** : MOB 1  
**Received** : 23 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**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.