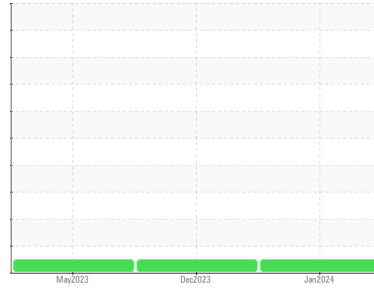




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(99295V)**  
 Machine Id  
**223036**

Component  
**Diesel Engine**  
 Fluid

**PETRO CANADA SUPREME™ SYNTHETIC BLEND 5W20 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0104994</b>	GFL0104998	GFL0081478
Sample Date	Client Info		<b>29 Jan 2024</b>	28 Dec 2023	23 May 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	650
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>25</b>	52	46
Chromium	ppm	ASTM D5185m >20	<b>1</b>	2	3
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	1
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	2
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >25	<b>12</b>	28	11
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	3
Tin	ppm	ASTM D5185m >15	<b>1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>&lt;1</b>	3	4
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>58</b>	60	69
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m	<b>1017</b>	992	1056
Calcium	ppm	ASTM D5185m	<b>1062</b>	1063	1265
Phosphorus	ppm	ASTM D5185m 770	<b>1012</b>	1071	1021
Zinc	ppm	ASTM D5185m	<b>1203</b>	1323	1406
Sulfur	ppm	ASTM D5185m 2690	<b>2728</b>	3008	3361

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>9</b>	9	14
Sodium	ppm	ASTM D5185m	<b>10</b>	5	18
Potassium	ppm	ASTM D5185m >20	<b>17</b>	46	5

## INFRA-RED

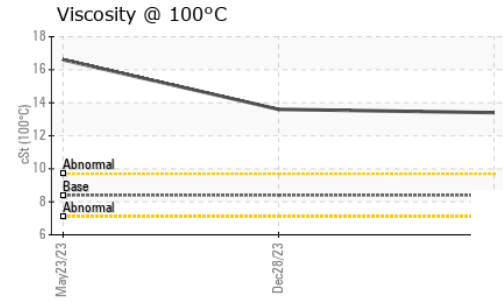
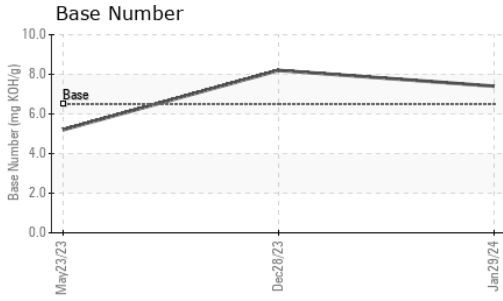
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.8</b>	1.4	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.3</b>	9.7	17.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.7</b>	21.3	34.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.5</b>	15.3	34.5
Base Number (BN)	mg KOH/g	ASTM D2896 6.5	<b>7.4</b>	8.2	5.2



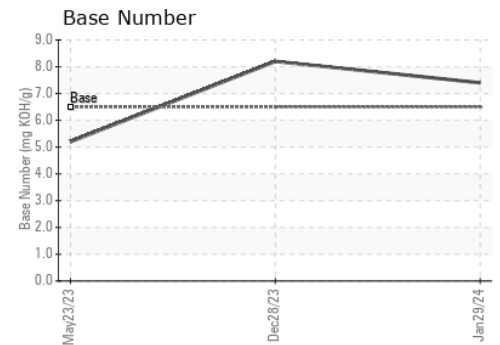
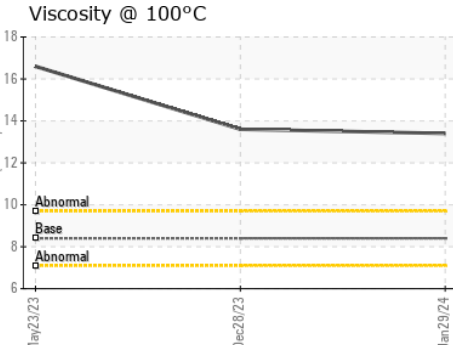
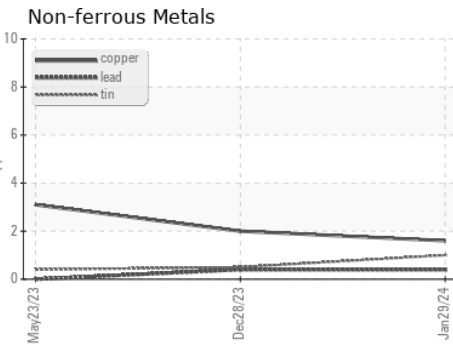
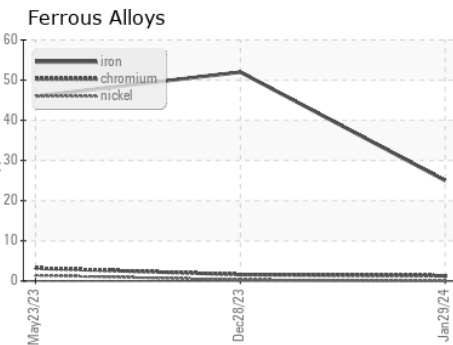
# OIL ANALYSIS REPORT



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 @ 100°C	cSt	ASTM D445 8.4	<b>13.4</b>	13.6	16.6

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0104994      **Received** : 31 Jan 2024  
 Lab Number : **06075438**      **Diagnosed** : 01 Feb 2024  
 Unique Number : 10857529      **Diagnostician** : Don Baldrige  
 Test Package : FLEET

**GFL Environmental - 893 - OK East Hauling**  
 2100 Lilly Street  
 Seminole, OK  
 US 74868  
 Contact: Roger Barlow  
 rbarlow@gflenv.com  
 T: (405)204-6183  
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)