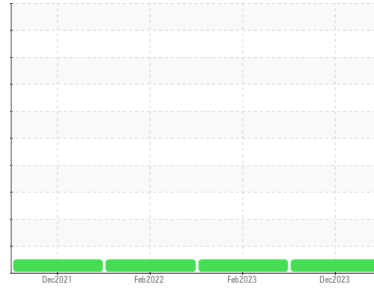


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**BLUE BIRD 002054**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (18 QTS)**

## 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. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PCA0091574</b>	PCA0071391	PCA0045441
Sample Date	Client Info			<b>08 Dec 2023</b>	16 Feb 2023	24 Feb 2022
Machine Age	mls Client Info			<b>204336</b>	198070	190462
Oil Age	mls Client Info			<b>6266</b>	7608	2728
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<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	>130	<b>33</b>	54	37
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	2	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	8	6
Lead	ppm	ASTM D5185m	>20	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m	>125	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

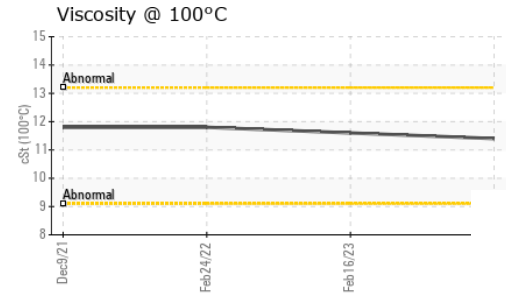
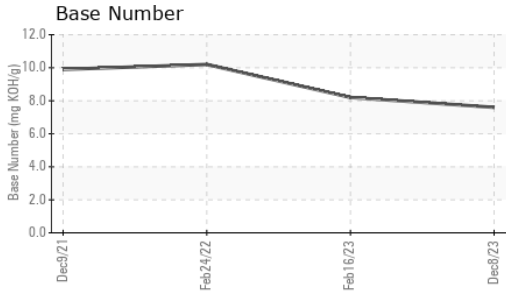
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	0	5
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>60</b>	59	59
Manganese	ppm	ASTM D5185m		<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>909</b>	919	977
Calcium	ppm	ASTM D5185m		<b>1015</b>	1095	1103
Phosphorus	ppm	ASTM D5185m		<b>831</b>	933	997
Zinc	ppm	ASTM D5185m		<b>1160</b>	1189	1219
Sulfur	ppm	ASTM D5185m		<b>2709</b>	3143	2698

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	4
Sodium	ppm	ASTM D5185m		<b>0</b>	7	2
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	17	4

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	<b>1.4</b>	2.1	1.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.3</b>	11.9	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.0</b>	24.2	22.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.8</b>	19.7	16.1
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.6</b>	8.2	10.2

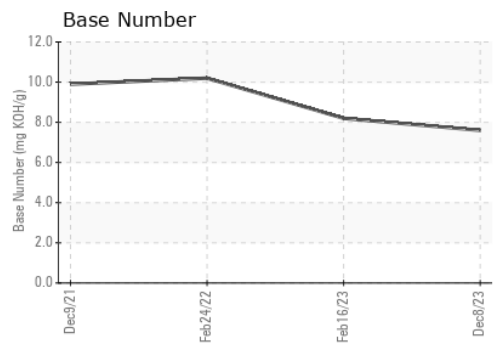
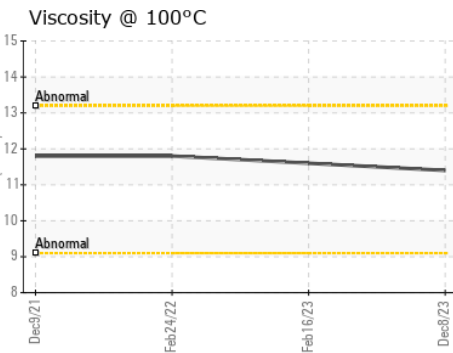
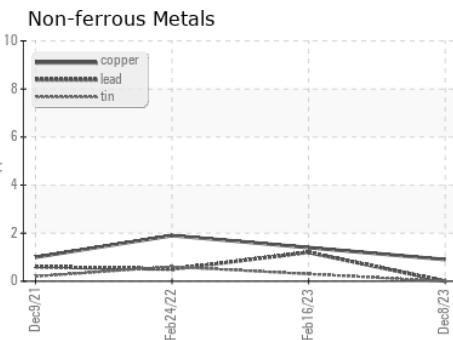
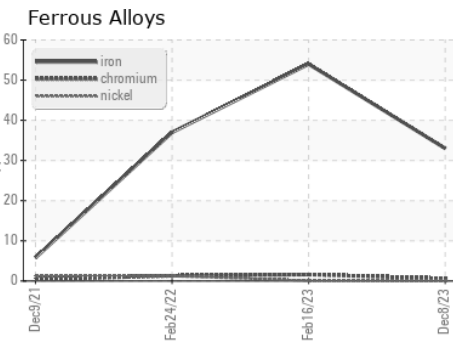
# OIL ANALYSIS REPORT



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	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	<b>11.4</b>	11.6	11.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0091574 **Received** : 20 Dec 2023  
**Lab Number** : **06040276** **Diagnosed** : 21 Dec 2023  
**Unique Number** : 10795505 **Diagnostician** : Sean Felton  
**Test Package** : FLEET ( Additional Tests: FT-IR(Diff) )

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)

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