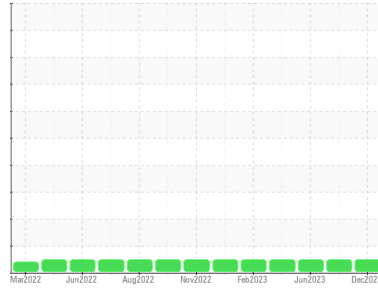


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Plymouth & Brockton**  
 Machine Id  
**11445**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 15W40 (--- 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. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0104711</b>	PCA0098693	PCA0090672
Sample Date	Client Info		<b>09 Dec 2023</b>	09 Sep 2023	19 Jun 2023
Machine Age	mls	Client Info	<b>197293</b>	172994	149736
Oil Age	mls	Client Info	<b>24000</b>	24000	24000
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 >165	<b>22</b>	15	32
Chromium	ppm	ASTM D5185m >5	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	1
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>3</b>	<1	1
Lead	ppm	ASTM D5185m >150	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >90	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>6</b>	4	6
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>61</b>	57	63
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>938</b>	936	899
Calcium	ppm	ASTM D5185m	<b>1142</b>	1129	1098
Phosphorus	ppm	ASTM D5185m	<b>987</b>	990	996
Zinc	ppm	ASTM D5185m	<b>1212</b>	1272	1203
Sulfur	ppm	ASTM D5185m	<b>3213</b>	2987	2888

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	<b>4</b>	3	4
Sodium	ppm	ASTM D5185m	<b>0</b>	1	<1
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	1

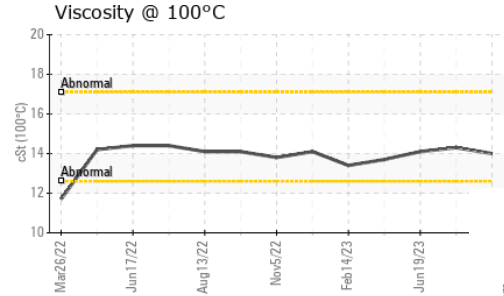
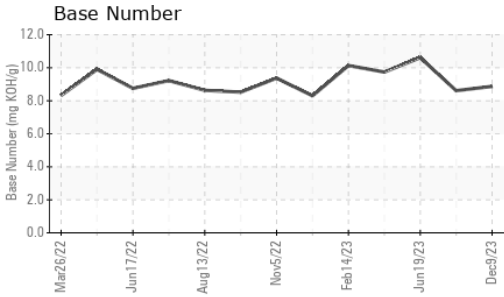
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >7.5	<b>2.7</b>	2.1	2.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.4</b>	10.2	9.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.6</b>	22.8	23.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.7</b>	16.1	16.8
Base Number (BN)	mg KOH/g	ASTM D2896	<b>8.87</b>	8.61	10.61

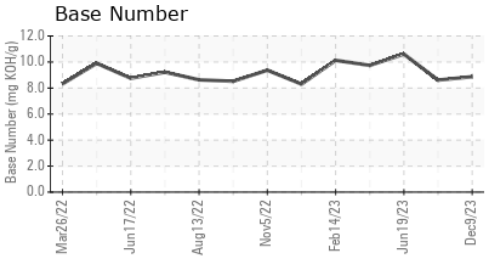
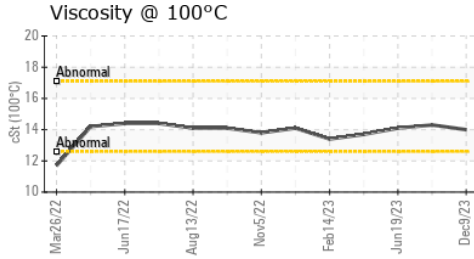
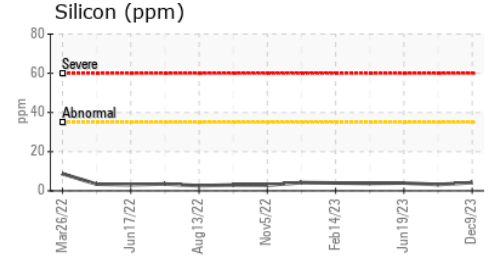
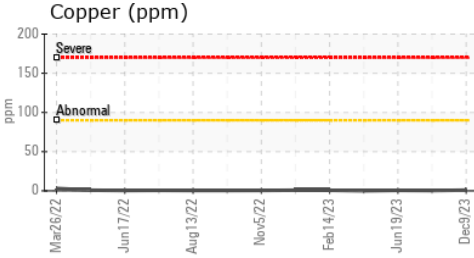
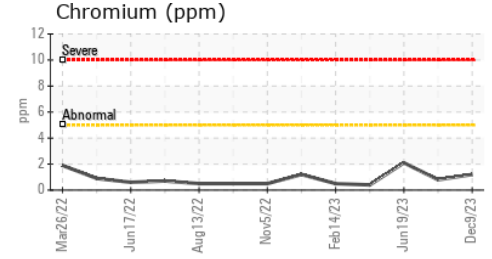
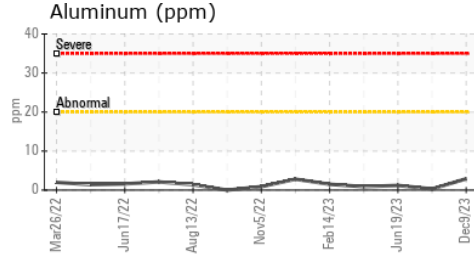
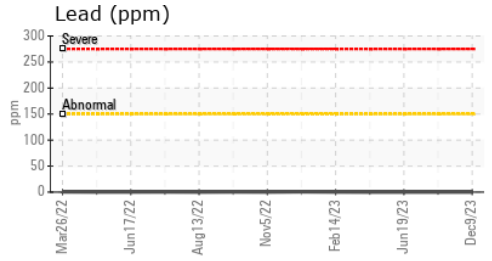
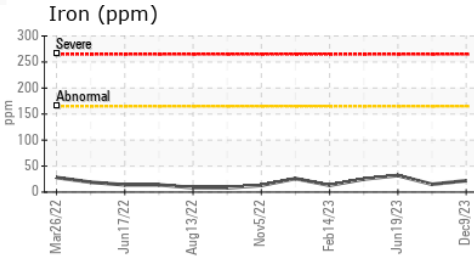
# OIL ANALYSIS REPORT



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>14.0</b>	14.3	14.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0104711 **Recieved** : 21 Dec 2023  
**Lab Number** : **06042313** **Diagnosed** : 22 Dec 2023  
**Unique Number** : 10802921 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

**PLYMOUTH & BROCKTON**  
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 PLYMOUTH, MA  
 US 02360  
 Contact: Donald Pelquin  
 Dpelquin@P-B.com  
 T: (508)732-6039  
 F: (508)732-6091

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)