

# OIL ANALYSIS REPORT

Sample Rating Trend

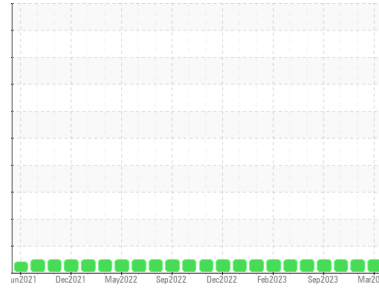
**NORMAL**



Area  
**Plymouth & Brockton**  
Machine Id  
**11436**

Component  
**Diesel Engine**  
Fluid

**PETRO CANADA DURON SHP 15W40 (36 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>PCA0109877</b>	PCA0104559	PCA0104492
Sample Date	Client Info		<b>01 Mar 2024</b>	20 Jan 2024	14 Dec 2023
Machine Age	mls	Client Info	<b>287094</b>	275206	263874
Oil Age	mls	Client Info	<b>24000</b>	12000	24000
Oil Changed	Client Info		<b>Changed</b>	Not Changd	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>18</b>	9	15
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	2
Lead	ppm	ASTM D5185m >150	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >90	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m >5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>5</b>	10	7
Barium	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m 60	<b>59</b>	56	58
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>909</b>	859	934
Calcium	ppm	ASTM D5185m 1070	<b>1113</b>	1010	1097
Phosphorus	ppm	ASTM D5185m 1150	<b>979</b>	951	1007
Zinc	ppm	ASTM D5185m 1270	<b>1137</b>	1136	1255
Sulfur	ppm	ASTM D5185m 2060	<b>3160</b>	2748	2924

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	<b>3</b>	3	3
Sodium	ppm	ASTM D5185m	<b>2</b>	<1	2
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	<1

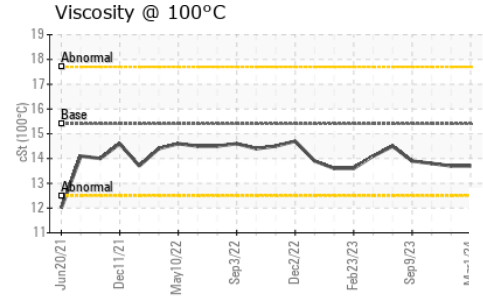
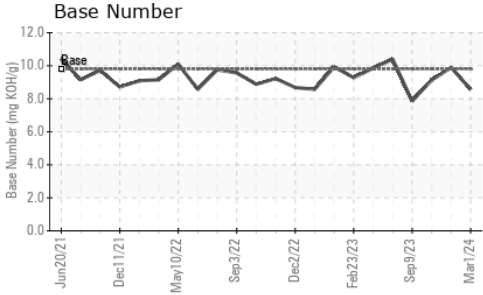
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >7.5	<b>2.2</b>	1.3	1.9
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.0</b>	7.6	10.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.4</b>	20.2	22.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.3</b>	13.5	15.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.57</b>	9.89	9.12

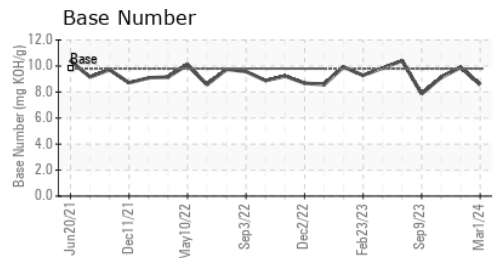
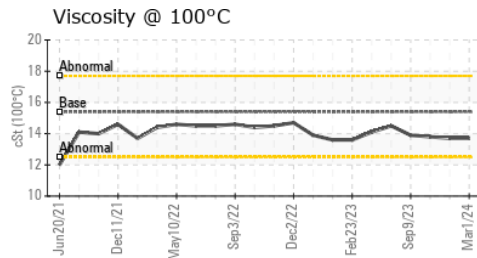
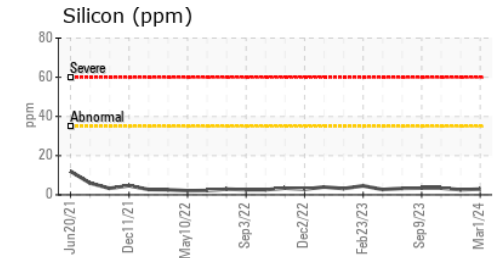
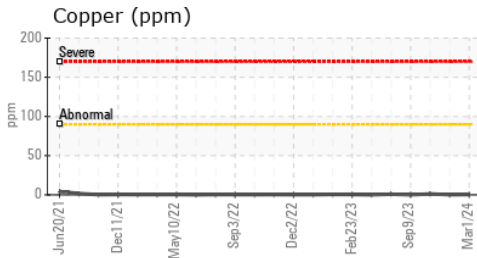
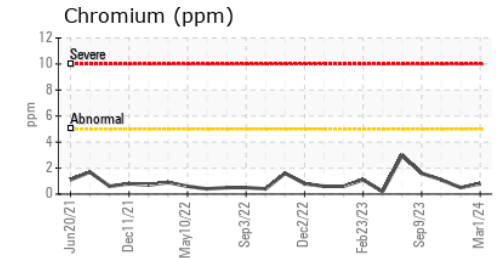
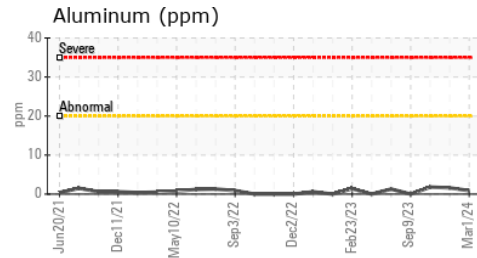
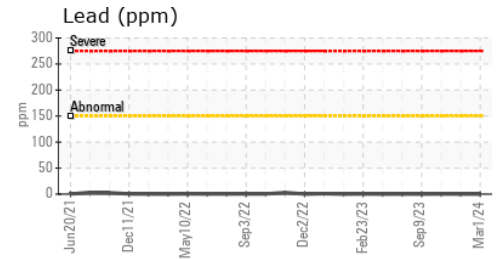
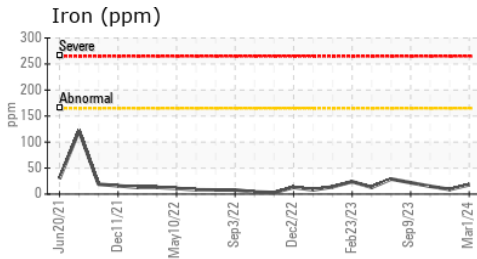
# OIL ANALYSIS REPORT



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	15.4	<b>13.7</b>	13.7	13.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0109877 **Received** : 12 Mar 2024  
**Lab Number** : **06116045** **Tested** : 13 Mar 2024  
**Unique Number** : 10924878 **Diagnosed** : 13 Mar 2024 - Wes Davis  
**Test Package** : MOB 2

**PLYMOUTH & BROCKTON**  
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 US 02360  
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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)