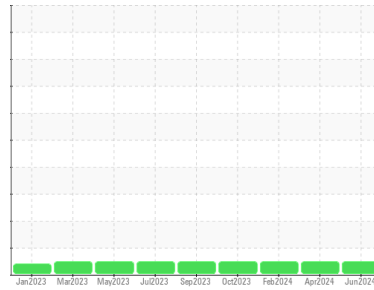


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**Plymouth & Brockton**

Machine Id  
**11451**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (39 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>PCA0104511</b>	PCA0109972	PCA0109869
Sample Date	Client Info			<b>05 Jun 2024</b>	03 Apr 2024	13 Feb 2024
Machine Age	mls	Client Info		<b>119929</b>	107458	96404
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	>90	<b>&lt;1</b>	8	8
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
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>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

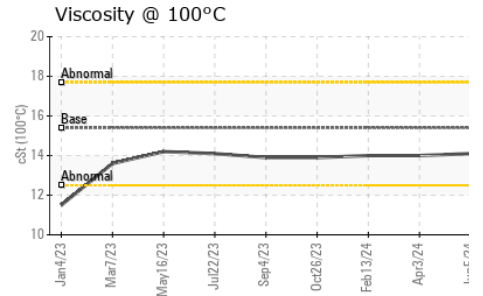
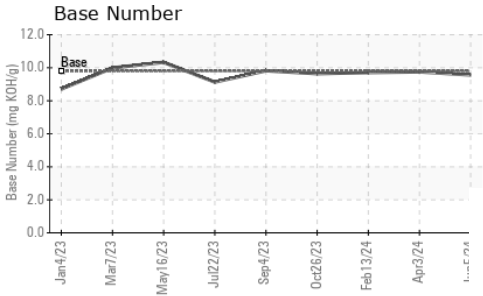
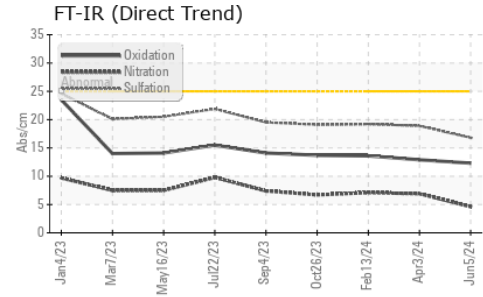
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>18</b>	8	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>59</b>	62	67
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>951</b>	885	932
Calcium	ppm	ASTM D5185m	1070	<b>1143</b>	1060	1085
Phosphorus	ppm	ASTM D5185m	1150	<b>1036</b>	1074	1008
Zinc	ppm	ASTM D5185m	1270	<b>1236</b>	1192	1153
Sulfur	ppm	ASTM D5185m	2060	<b>3731</b>	3477	3432

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	2
Sodium	ppm	ASTM D5185m		<b>2</b>	0	2
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	<b>0.1</b>	1	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.6</b>	6.9	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.8</b>	18.9	19.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.3</b>	12.9	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.56</b>	9.75	9.71

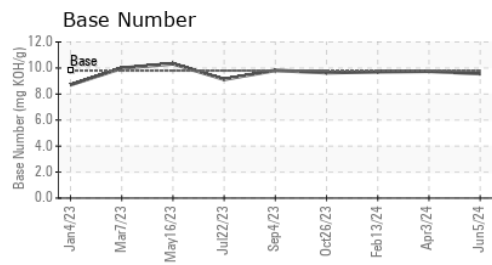
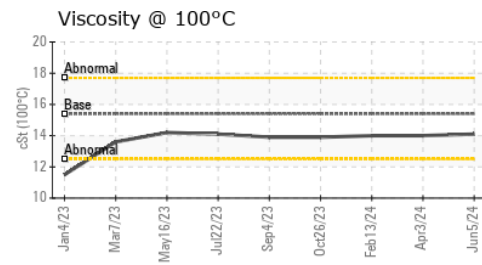
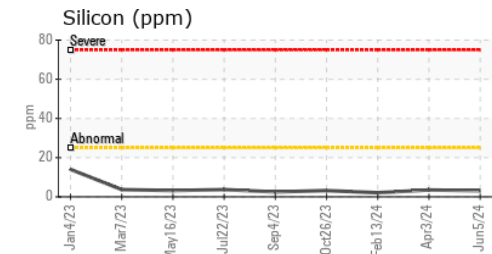
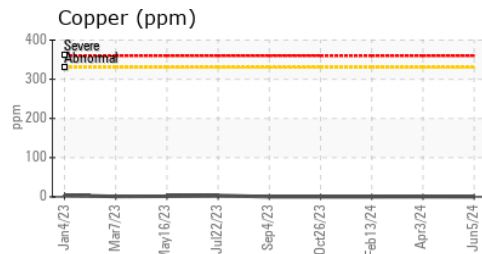
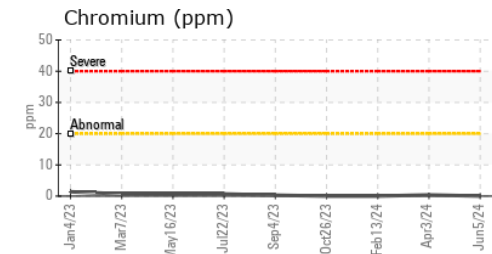
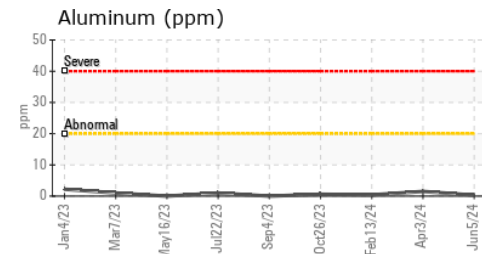
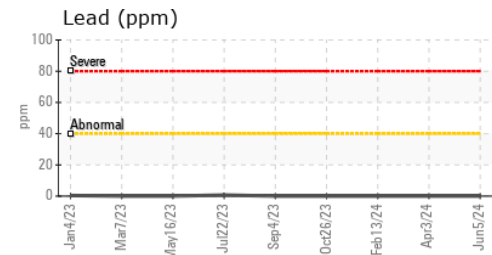
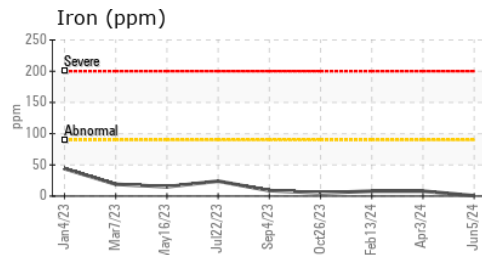
# OIL ANALYSIS REPORT



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	15.4	<b>14.1</b>	14.0	14.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0104511      **Received** : 19 Jun 2024  
**Lab Number** : **06214937**      **Tested** : 20 Jun 2024  
**Unique Number** : 11087801      **Diagnosed** : 20 Jun 2024 - Wes Davis  
**Test Package** : MOB 2

**PLYMOUTH & BROCKTON**  
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 PLYMOUTH, MA  
 US 02360  
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 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)