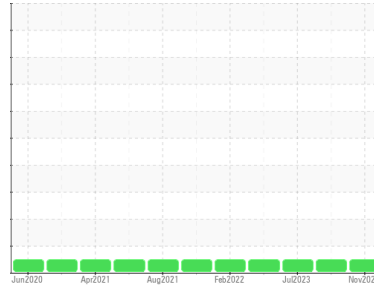


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**1523**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON HP 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>PC0076647</b>	PC0031841	PC0018605
Sample Date	Client Info		<b>13 Nov 2023</b>	06 Sep 2023	13 Jul 2023
Machine Age	kms	Client Info	<b>516252</b>	503493	493797
Oil Age	kms	Client Info	<b>12759</b>	16169	6473
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	>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 D5185(m) >100	<b>36</b>	27	11
Chromium	ppm	ASTM D5185(m) >20	<b>2</b>	2	1
Nickel	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m) >20	<b>5</b>	4	2
Lead	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m) >330	<b>2</b>	1	<1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>6</b>	9	4
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	2
Molybdenum	ppm	ASTM D5185(m) 60	<b>58</b>	55	60
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>918</b>	890	1000
Calcium	ppm	ASTM D5185(m) 1070	<b>1117</b>	1153	1084
Phosphorus	ppm	ASTM D5185(m) 1150	<b>973</b>	1045	1082
Zinc	ppm	ASTM D5185(m) 1270	<b>1206</b>	1180	1230
Sulfur	ppm	ASTM D5185(m) 2060	<b>2452</b>	2521	2711
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

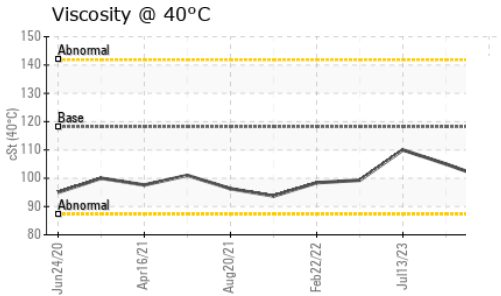
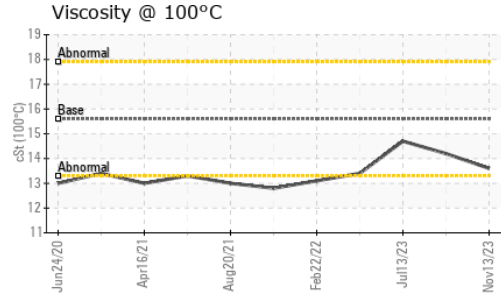
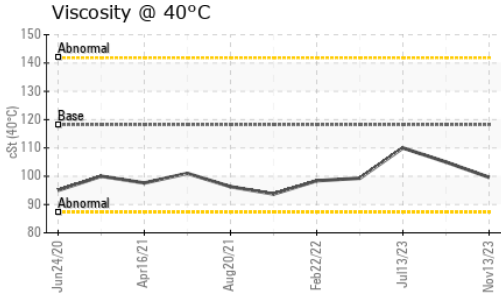
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>7</b>	10	17
Sodium	ppm	ASTM D5185(m)	<b>7</b>	6	4
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	<1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.7</b>	0.4	0
Nitration	Abs/cm	ASTM D7624* >20	<b>9.0</b>	7.5	5.5
Sulfation	Abs./1mm	ASTM D7415* >30	<b>20.3</b>	19.6	19.0

# OIL ANALYSIS REPORT

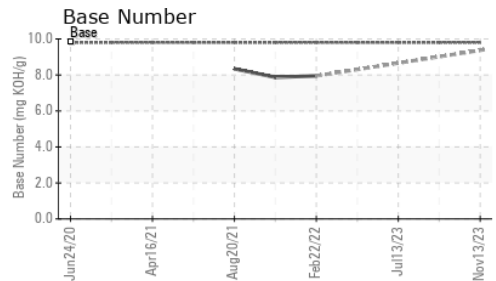
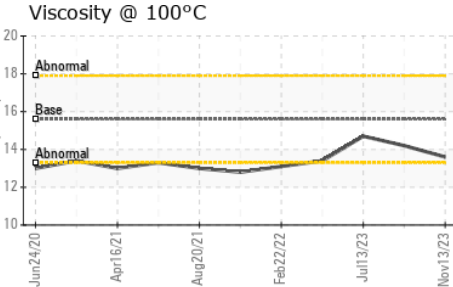
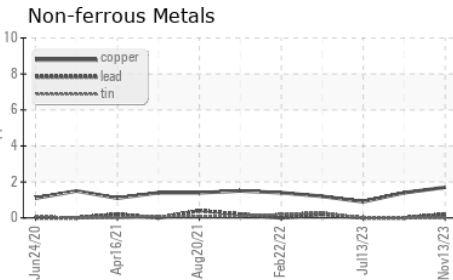
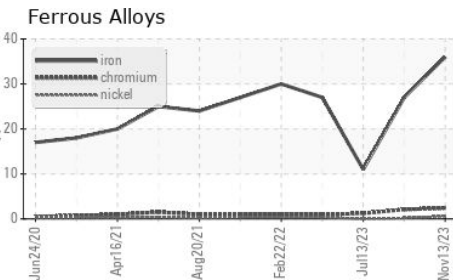


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.0</b>	14.6	13.9
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	<b>9.37</b>	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>99.6</b>	105	110
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>13.6</b>	14.2	14.7
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>136</b>	137	137

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0076647  
**Lab Number** : **02601470**  
**Unique Number** : 5694555  
**Test Package** : IND 2 ( Additional Tests: KV40, VI )

**Received** : 07 Dec 2023  
**Diagnosed** : 13 Dec 2023  
**Diagnostician** : Wes Davis

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

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