

# OIL ANALYSIS REPORT

Sample Rating Trend



**FUEL**



Machine Id  
**CASE 580 SUPER M CASE580**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

Light fuel dilution occurring. No other contaminants were detected 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>PC0040981</b>	---	---
Sample Date	Client Info	<b>14 Nov 2022</b>	---	---
Machine Age	hrs	Client Info	<b>2217</b>	---
Oil Age	hrs	Client Info	<b>176</b>	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>MARGINAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	---
Glycol	WC Method		<b>NEG</b>	---

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	<b>9</b>	---
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	---
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	---
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	---
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	---
Antimony	ppm	ASTM D5185(m)		<b>&lt;1</b>	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---
Molybdenum	ppm	ASTM D5185(m)	60	<b>51</b>	---
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>839</b>	---
Calcium	ppm	ASTM D5185(m)	1070	<b>1179</b>	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1048</b>	---
Zinc	ppm	ASTM D5185(m)	1270	<b>1133</b>	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>2635</b>	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---

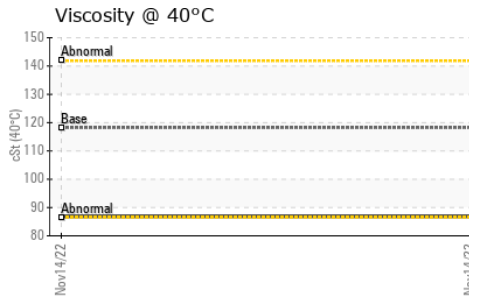
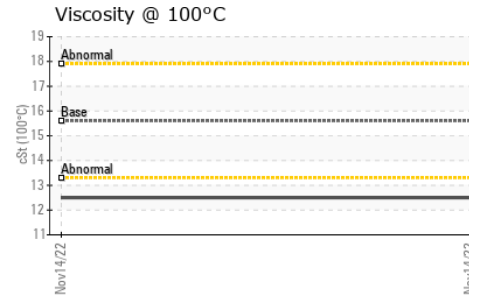
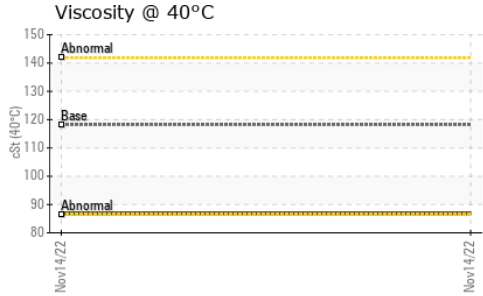
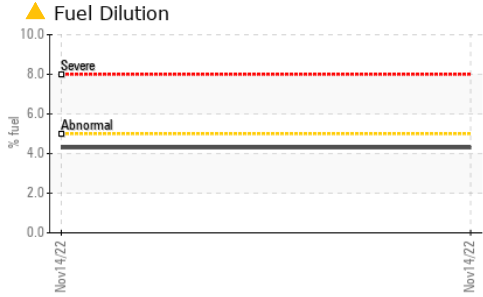
## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---
Fuel	%	ASTM D7593*	>5	<b>▲ 4.3</b>	---

## INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0</b>	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.0</b>	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.7</b>	---

# OIL ANALYSIS REPORT

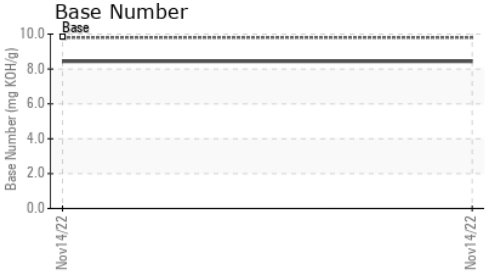
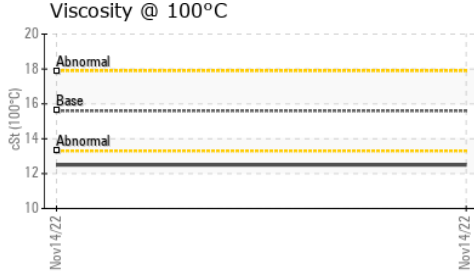
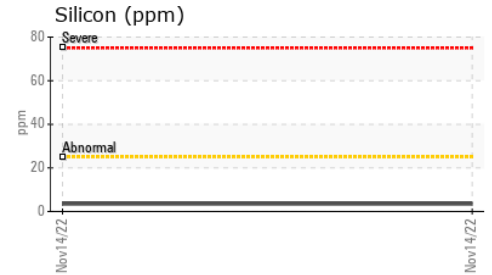
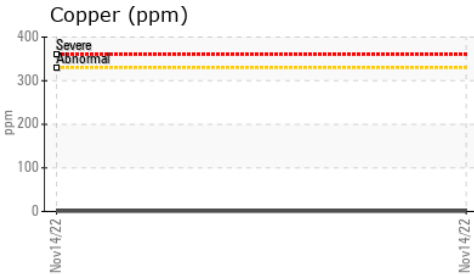
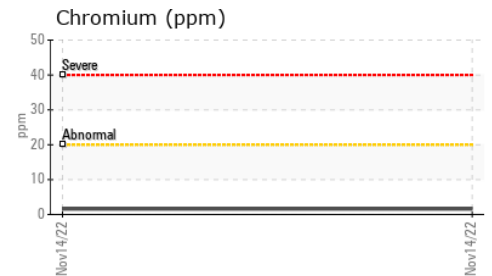
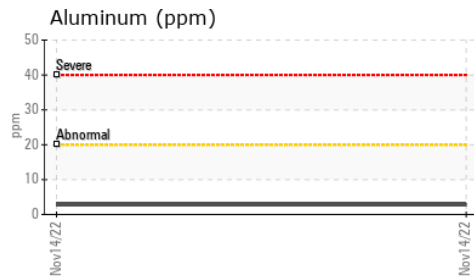
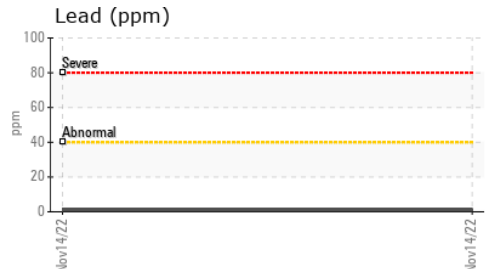
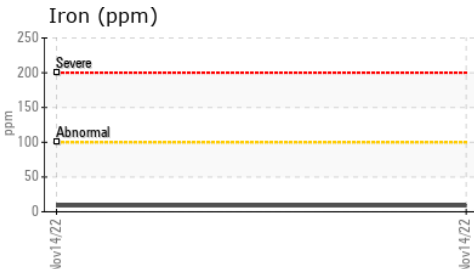


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>15.9</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	<b>8.44</b>	---	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>86.8</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>12.5</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>140</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0040981 **Received** : 13 Jan 2023  
**Lab Number** : 02533041 **Tested** : 17 Jan 2023  
**Unique Number** : 5514040 **Diagnosed** : 17 Jan 2023 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, KV40, PercentFuel, VI )

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*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.*