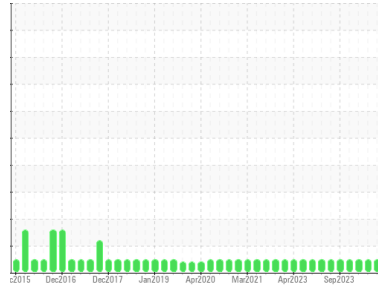


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**Fwd Machinery Space [450303138]**

Machine Id

**Emergency Generator - Engine Crank Case (S/N Sample Tag CD-84001-S1)**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON MARINE SAE 40 (145 LTR)**

## 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>PC0080794</b>	PC0076359	PC
Sample Date	Client Info		<b>04 Apr 2024</b>	10 Mar 2024	14 Jan 2024
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
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
PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >200	<b>4</b>	4	4
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >30	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m) >30	<b>13</b>	11	9
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
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

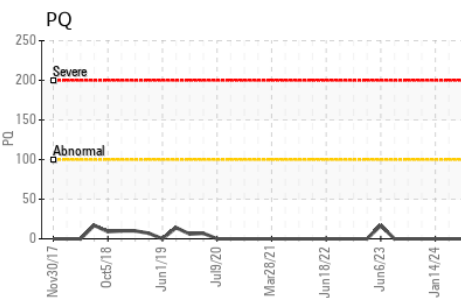
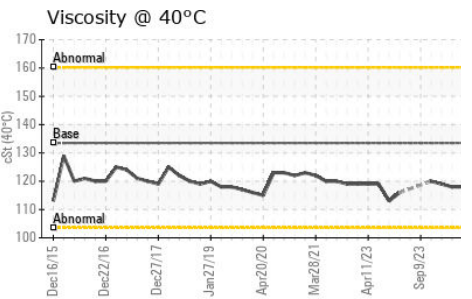
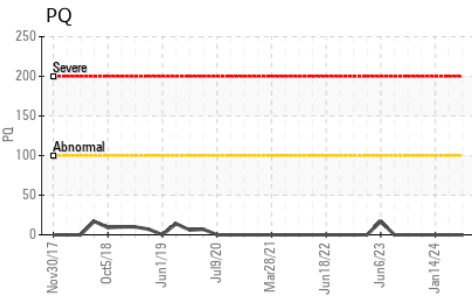
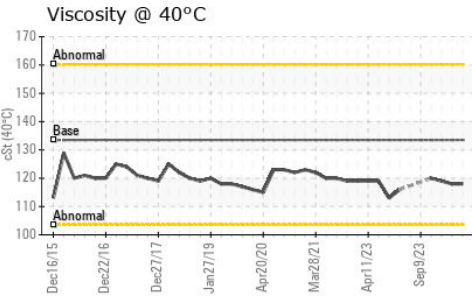
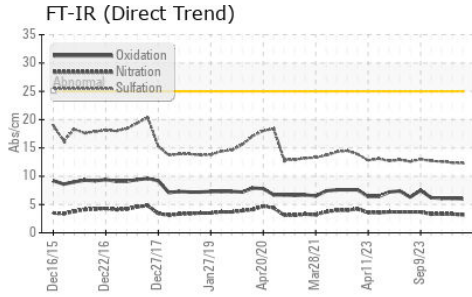
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 1.0	<b>1</b>	1	1
Barium	ppm	ASTM D5185(m) 1.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 1.0	<b>2</b>	1	2
Manganese	ppm	ASTM D5185(m) 1	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 15	<b>942</b>	936	925
Calcium	ppm	ASTM D5185(m) 2540	<b>1061</b>	1038	1065
Phosphorus	ppm	ASTM D5185(m) 1000	<b>1103</b>	1073	1099
Zinc	ppm	ASTM D5185(m) 1110	<b>1243</b>	1221	1253
Sulfur	ppm	ASTM D5185(m) 3700	<b>2705</b>	2637	2883
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >30	<b>8</b>	8	9
Sodium	ppm	ASTM D5185(m)	<b>1</b>	1	1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	<1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >0.8	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624* >20	<b>3.2</b>	3.3	3.3
Sulfation	Abs./1mm	ASTM D7415* >30	<b>12.3</b>	12.4	12.6

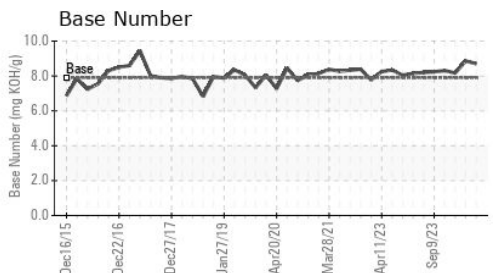
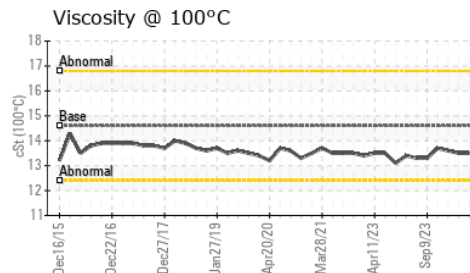
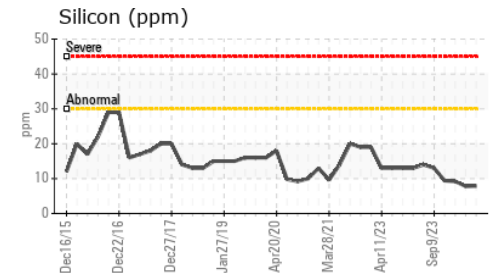
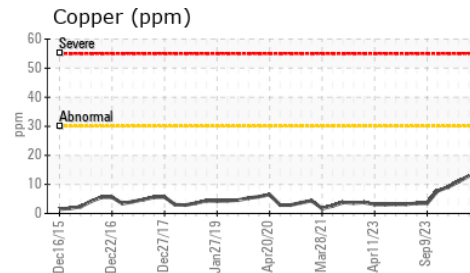
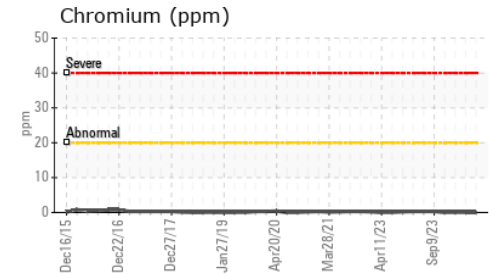
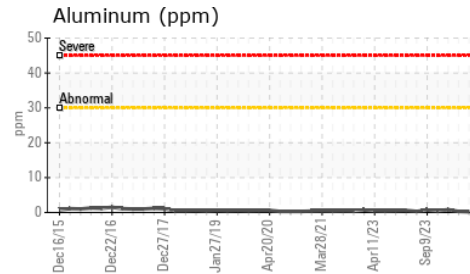
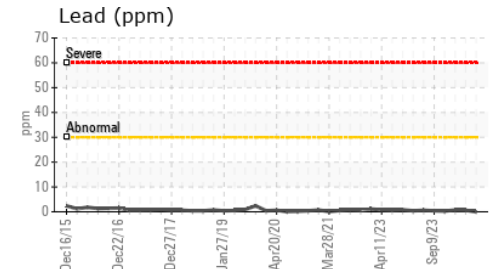
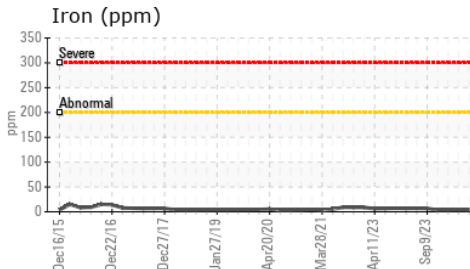


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>6.0</b>	6.1	6.1
Base Number (BN)	mg KOH/g	ASTM D2896*	7.9	<b>8.70</b>	8.86	8.17

VISUAL		method	limit/base	current	history1	history2
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)	133.5	<b>118</b>	118	119
Visc @ 100°C	cSt	ASTM D7279(m)	14.6	<b>13.5</b>	13.5	13.6
Viscosity Index (VI)	Scale	ASTM D2270*	109	<b>110</b>	110	111

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0080794 **Received** : 26 Apr 2024  
**Lab Number** : **02631567** **Tested** : 29 Apr 2024  
**Unique Number** : 5772720 **Diagnosed** : 29 Apr 2024 - Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: KV40, PQ, VI )

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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