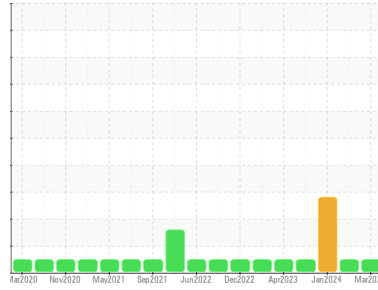


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**DR167**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON UHP 5W40 (40 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 condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PC0078476</b>	PC0082052	PC0078388
Sample Date	Client Info		<b>18 Mar 2024</b>	30 Jan 2024	18 Jan 2024
Machine Age	hrs	Client Info	<b>14829</b>	14627	14622
Oil Age	hrs	Client Info	<b>0</b>	250	250
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	SEVERE

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	1	▲ 51.3
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>17</b>	6	23
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	2
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	1	3
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	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)	65	<b>48</b>	57	20
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	65	<b>54</b>	54	27
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1160	<b>1071</b>	1058	526
Calcium	ppm	ASTM D5185(m)	820	<b>800</b>	780	398
Phosphorus	ppm	ASTM D5185(m)	1160	<b>959</b>	987	478
Zinc	ppm	ASTM D5185(m)	1260	<b>1147</b>	1111	563
Sulfur	ppm	ASTM D5185(m)	3000	<b>2653</b>	2861	1292
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

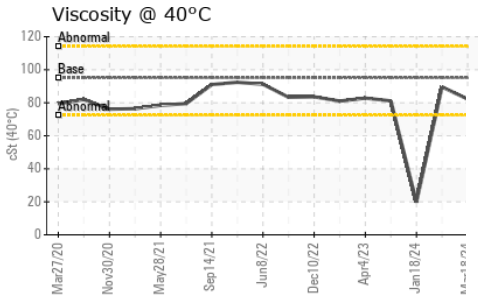
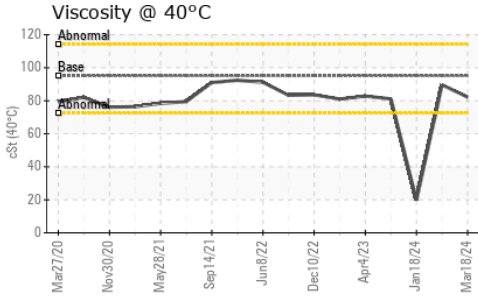
## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>1</b>	5	7
Sodium	ppm	ASTM D5185(m)		<b>3</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.2</b>	6.7	8.7
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>20.5</b>	19.7	17.4

# OIL ANALYSIS REPORT

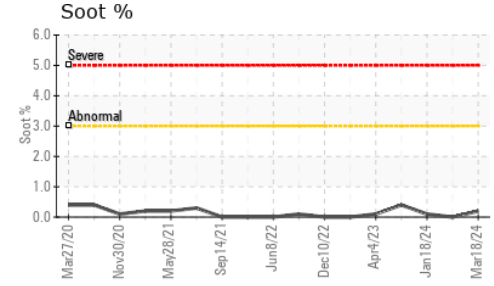
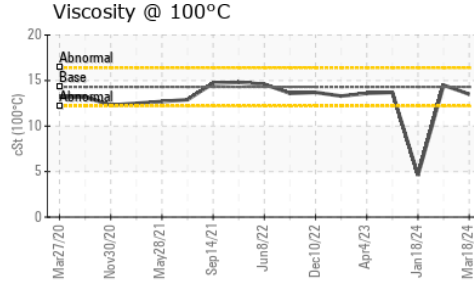
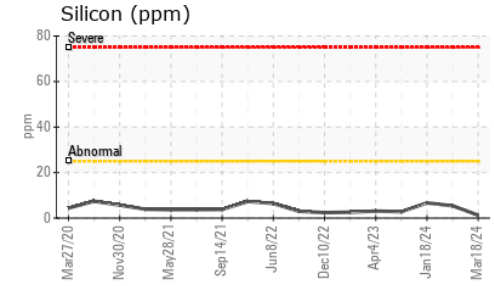
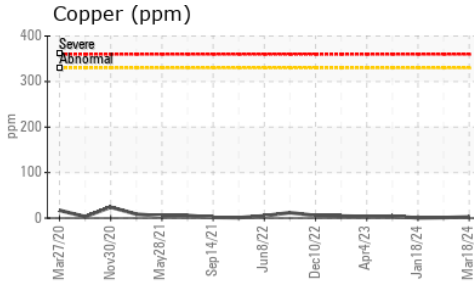
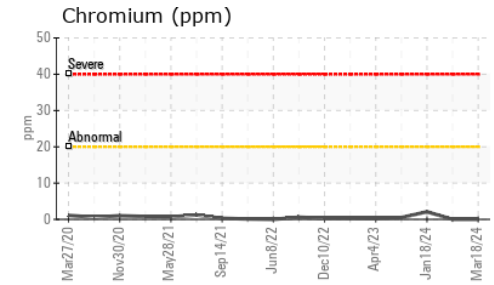
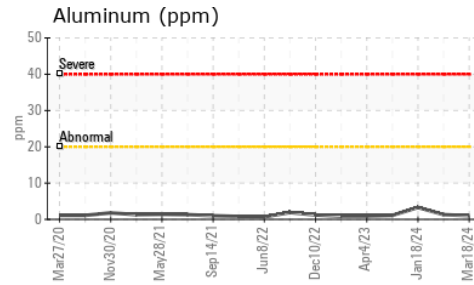
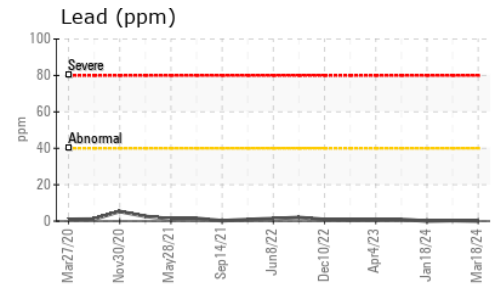
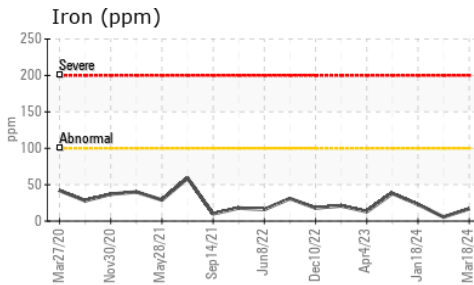


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>18.1</b>	17.0	15.1

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)	95.1	<b>82.2</b>	89.6	▲ 19.8
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	<b>13.5</b>	14.5	▲ 4.6
Viscosity Index (VI)	Scale	ASTM D2270*	169	<b>167</b>	168	155

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078476  
**Lab Number** : 02624909  
**Unique Number** : 5750028  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

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 Contact: Shannon Abbott  
 sabbott@gipi.com  
 T: (905)750-5900  
 F:

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.