

Machine Id  
**SPARTAN R115/25031**

Component  
**Right Diesel Engine**

Fluid  
**PETRO CANADA DURON HP 15W40 (26 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>PC0075232</b>	AP109953	AP104330
Sample Date	Client Info			<b>09 Oct 2023</b>	02 Apr 2019	07 Dec 2016
Machine Age	kms	Client Info		<b>251631</b>	174060	131328
Oil Age	kms	Client Info		<b>0</b>	0	0
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	>3.0		<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	<b>33</b>	32	19
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	3	3
Lead	ppm	ASTM D5185(m)	>25	<b>1</b>	4	2
Copper	ppm	ASTM D5185(m)	>100	<b>3</b>	7	2
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	1
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

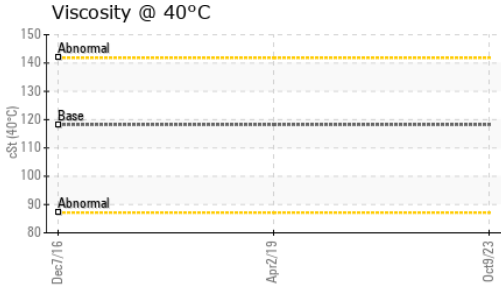
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	21	258
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>64</b>	52	77
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>1022</b>	948	370
Calcium	ppm	ASTM D5185(m)	1070	<b>1120</b>	1295	1623
Phosphorus	ppm	ASTM D5185(m)	1150	<b>991</b>	1016	1007
Zinc	ppm	ASTM D5185(m)	1270	<b>1262</b>	1246	1270
Sulfur	ppm	ASTM D5185(m)	2060	<b>2461</b>	2841	2846
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>8</b>	16	20
Sodium	ppm	ASTM D5185(m)		<b>7</b>	5	4
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	1	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>0.4</b>	0.5	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.3</b>	13.6	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>26.3</b>	28.5	26.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>25.5</b>	27.4	21.9

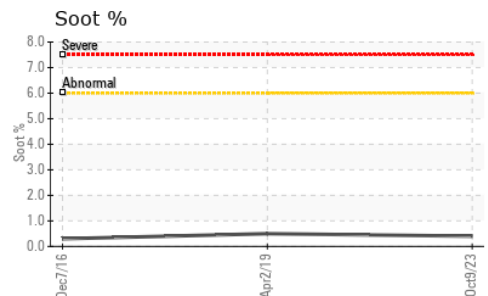
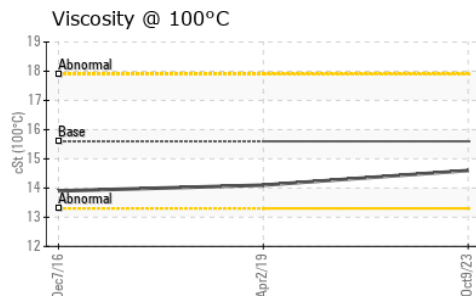
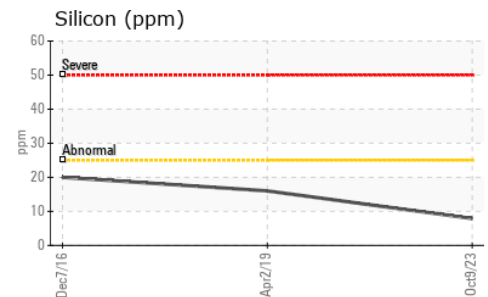
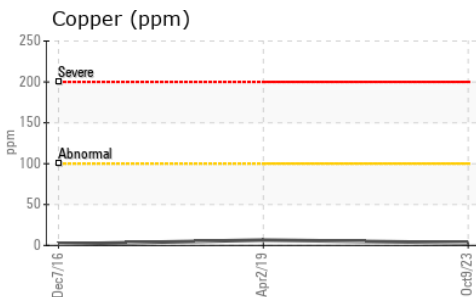
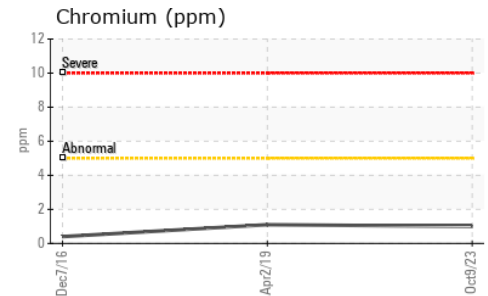
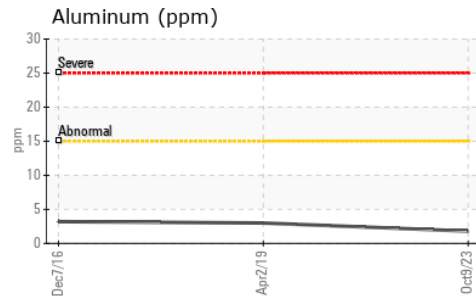
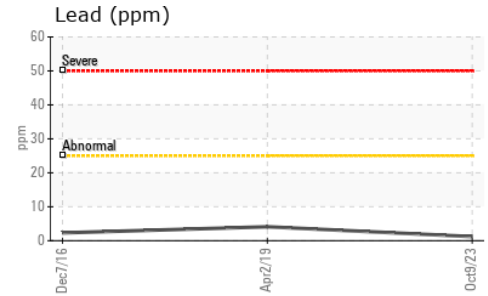
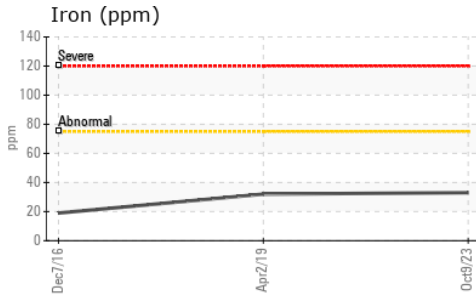
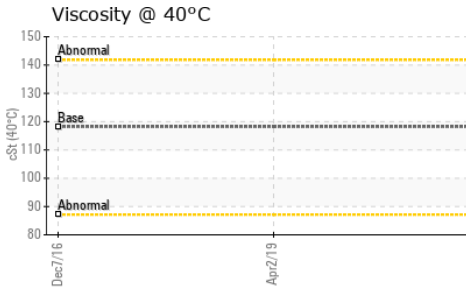
# OIL ANALYSIS REPORT



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)	118.2	<b>111</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>14.6</b>	14.1	13.9
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>134</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0075232 **Received** : 06 Nov 2023  
**Lab Number** : **02594128** **Diagnosed** : 07 Nov 2023  
**Unique Number** : 5671207 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: KV40, 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.