

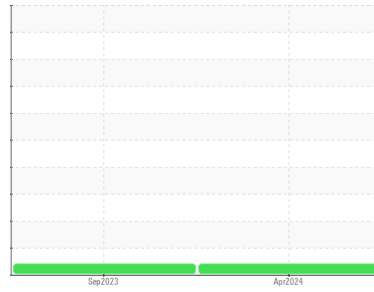


# OIL ANALYSIS REPORT



Machine Id  
**EX-6 88**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

### Sample Rating Trend



### VISCOSITY



### 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KFS0003996</b>	KFS0003923	---
Sample Date	Client Info		<b>15 Apr 2024</b>	19 Sep 2023	---
Machine Age	hrs	Client Info	<b>9296</b>	6000	---
Oil Age	hrs	Client Info	<b>488</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>ATTENTION</b>	ATTENTION	---

### CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	0.3	---
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>19</b>	16	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	7	---
Lead	ppm	ASTM D5185m >40	<b>1</b>	1	---
Copper	ppm	ASTM D5185m >330	<b>2</b>	<1	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>2</b>	9	---
Barium	ppm	ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>69</b>	65	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m	<b>945</b>	988	---
Calcium	ppm	ASTM D5185m	<b>1188</b>	1306	---
Phosphorus	ppm	ASTM D5185m	<b>1073</b>	1080	---
Zinc	ppm	ASTM D5185m	<b>1236</b>	1328	---
Sulfur	ppm	ASTM D5185m	<b>3187</b>	3165	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	5	---
Sodium	ppm	ASTM D5185m	<b>4</b>	1	---
Potassium	ppm	ASTM D5185m >20	<b>4</b>	0	---

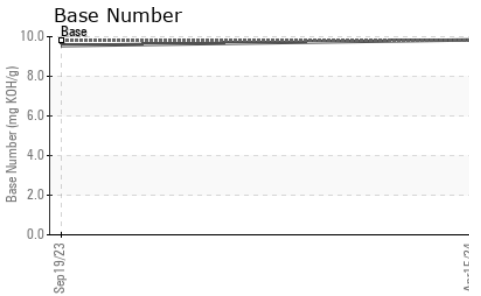
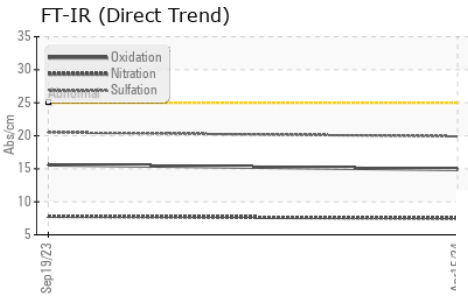
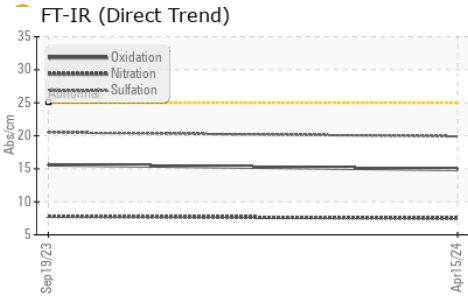
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	0.7	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.5</b>	7.8	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.9</b>	20.5	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.9</b>	15.6	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.84</b>	9.55	---

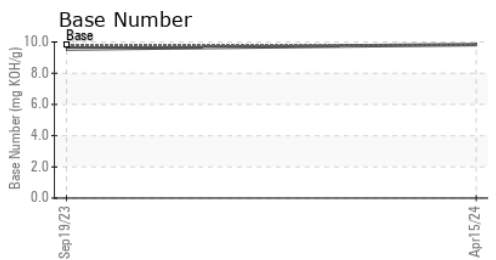
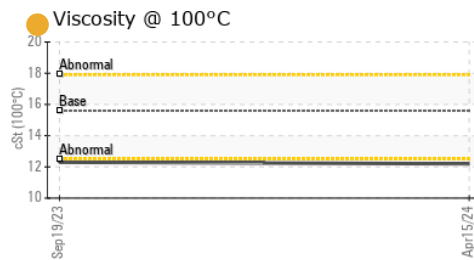
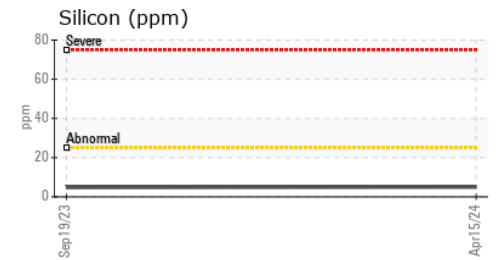
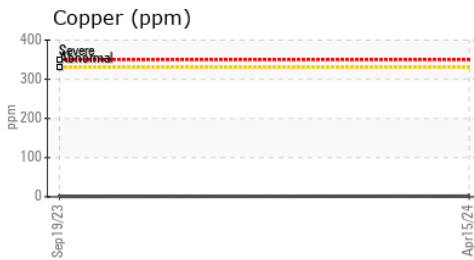
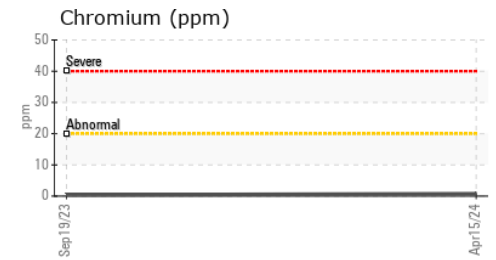
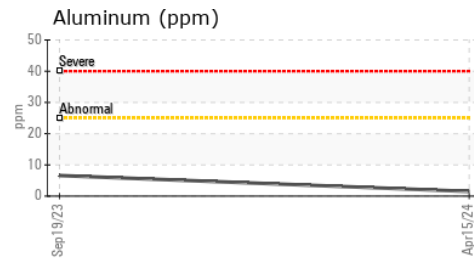
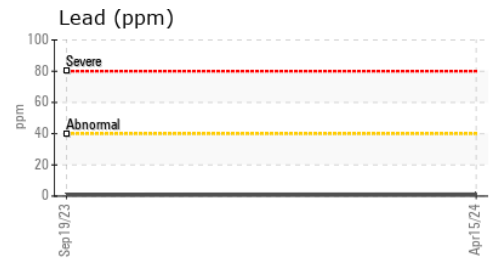
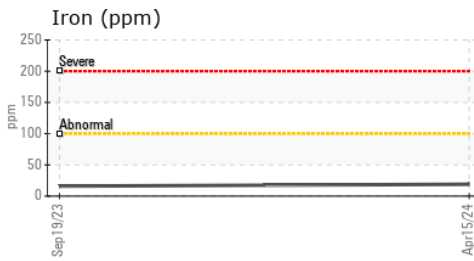
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.6	<span style="color: orange;">●</span> 12.2	<span style="color: orange;">●</span> 12.3	---

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0003996      **Received** : 19 Apr 2024  
**Lab Number** : 06155264      **Tested** : 24 Apr 2024  
**Unique Number** : 10990687      **Diagnosed** : 24 Apr 2024 - Sean Felton  
**Test Package** : MOB 2

**HARNES LLC**  
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 US 38401  
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 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)