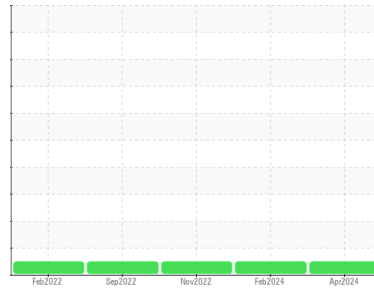




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**EX-1 27**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON HP 15W40 (--- GAL)**

### 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>KFS0006002</b>	KFS0004077	KFS0002874
Sample Date	Client Info		<b>16 Apr 2024</b>	16 Feb 2024	22 Nov 2022
Machine Age	hrs	Client Info	<b>8432</b>	8308	7619
Oil Age	hrs	Client Info	<b>124</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	>5	<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
Iron	ppm	ASTM D5185m >100	<b>7</b>	4	2
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>10</b>	8	3
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >330	<b>2</b>	3	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>1</b>	2	5
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>58</b>	64	55
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>966</b>	990	877
Calcium	ppm	ASTM D5185m	<b>1093</b>	1106	1147
Phosphorus	ppm	ASTM D5185m	<b>1142</b>	1118	989
Zinc	ppm	ASTM D5185m	<b>1277</b>	1237	1205
Sulfur	ppm	ASTM D5185m	<b>3883</b>	3383	3778

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	4	6
Sodium	ppm	ASTM D5185m	<b>2</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	1

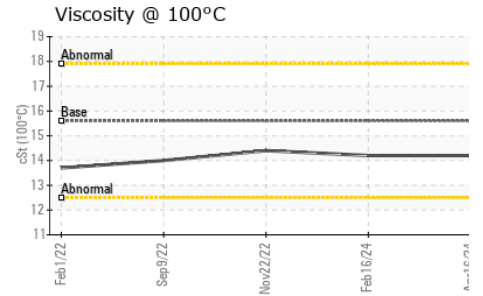
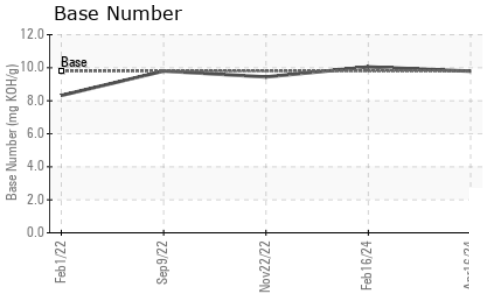
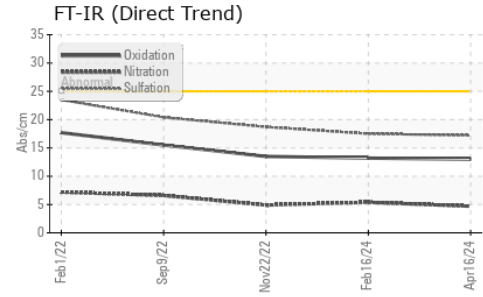
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.3	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>4.7</b>	5.4	4.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.2</b>	17.5	18.7

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.0</b>	13.2	13.5
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.79</b>	10.05	9.44

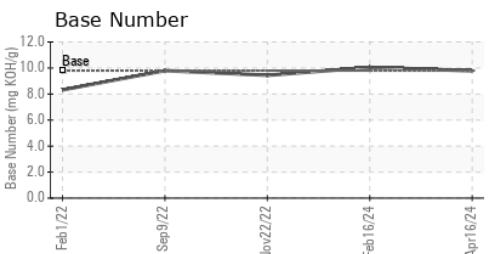
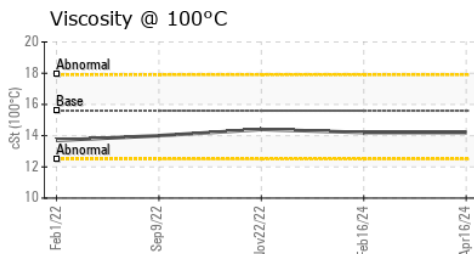
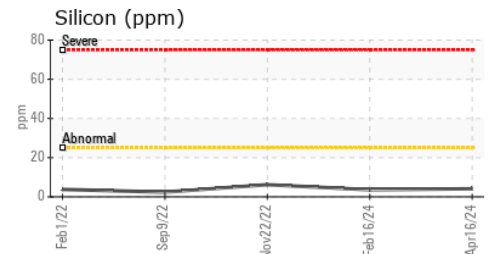
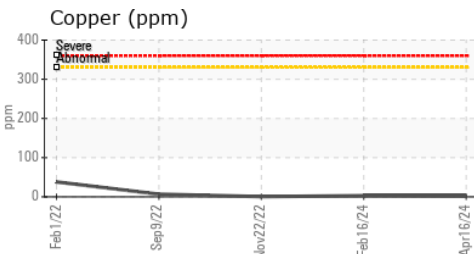
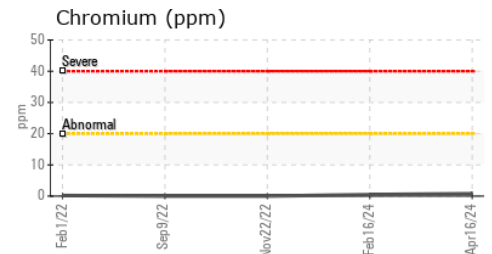
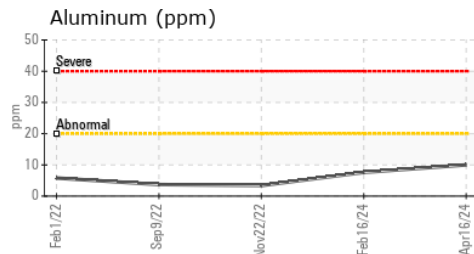
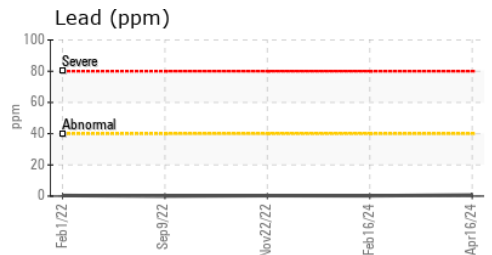
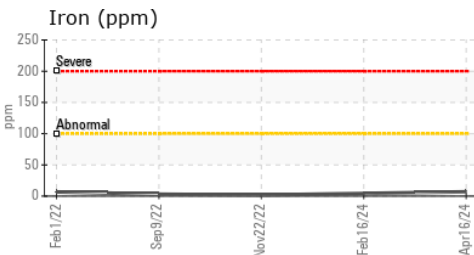
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.6	<b>14.2</b>	14.2	14.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0006002      **Received** : 25 Apr 2024  
**Lab Number** : **06160584**      **Tested** : 26 Apr 2024  
**Unique Number** : 10996007      **Diagnosed** : 26 Apr 2024 - Wes Davis  
**Test Package** : MOB 2

**HARNES LLC**  
 855 N JAMES CAMPBELL BLVD  
 COLUMBIA, TN  
 US 38401  
 Contact: BEN HARNES  
 ben@slectharness.com  
 T: (615)733-4480  
 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)