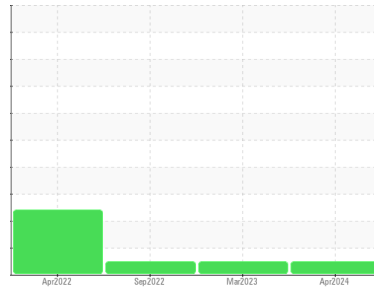




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Mini Excavator**  
 Machine Id  
**137**  
 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>KFS0006001</b>	KFS0002924	KFS0001534
Sample Date	Client Info		<b>18 Apr 2024</b>	17 Mar 2023	20 Sep 2022
Machine Age	hrs	Client Info	<b>1960</b>	1296	887
Oil Age	hrs	Client Info	<b>664</b>	400	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>14</b>	15	8
Chromium	ppm	ASTM D5185m >20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	6	2
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>1</b>	1	2
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>&lt;1</b>	3	10
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>59</b>	53	62
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>981</b>	874	801
Calcium	ppm	ASTM D5185m	<b>1096</b>	1140	1180
Phosphorus	ppm	ASTM D5185m	<b>1170</b>	973	930
Zinc	ppm	ASTM D5185m	<b>1300</b>	1191	1130
Sulfur	ppm	ASTM D5185m	<b>3866</b>	3498	3157

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>7</b>	12	4
Sodium	ppm	ASTM D5185m	<b>3</b>	2	0
Potassium	ppm	ASTM D5185m >20	<b>1</b>	3	11

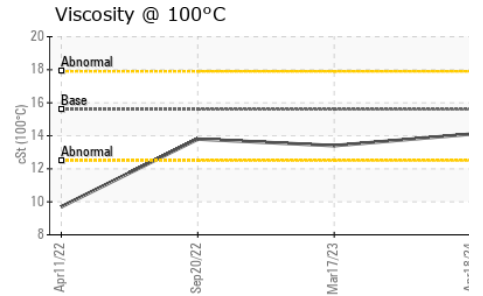
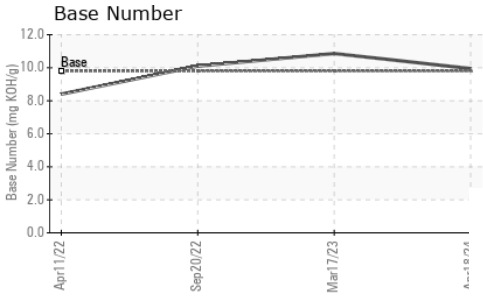
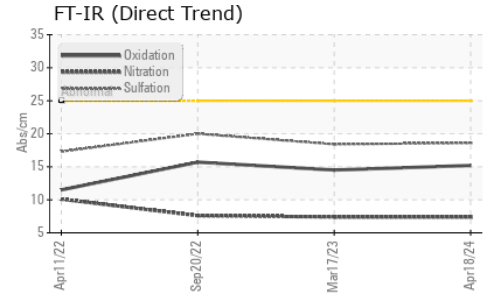
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.4</b>	7.4	7.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.6</b>	18.4	20.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.2</b>	14.5	15.7
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.95</b>	10.86	10.1

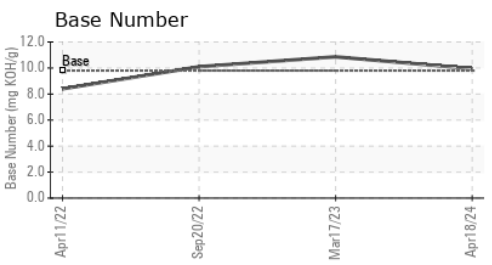
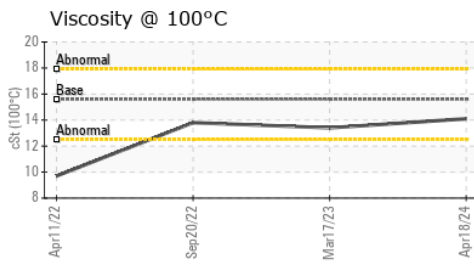
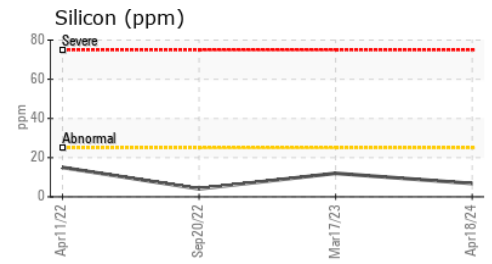
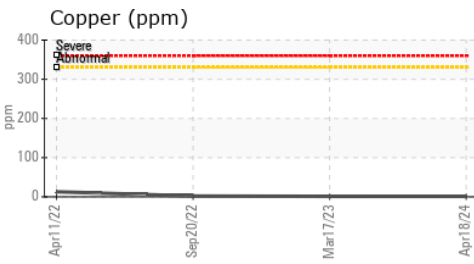
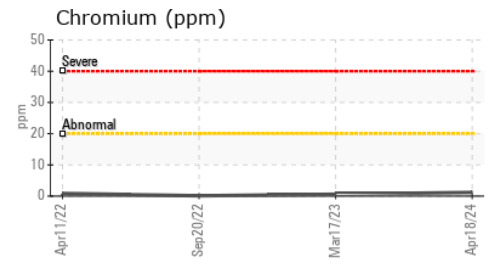
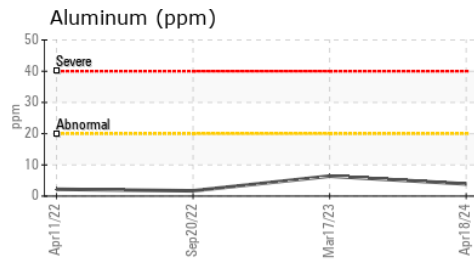
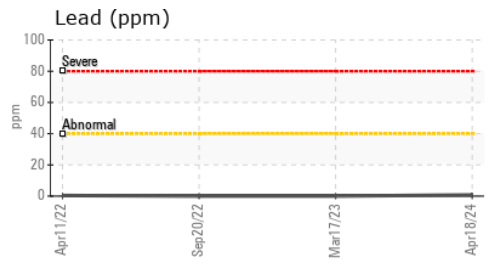
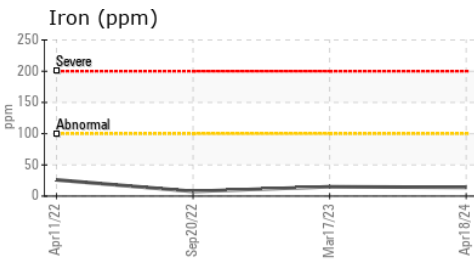
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
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	14.1	13.4

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0006001      **Received** : 25 Apr 2024  
**Lab Number** : 06160586      **Tested** : 26 Apr 2024  
**Unique Number** : 10996009      **Diagnosed** : 26 Apr 2024 - Wes Davis  
**Test Package** : MOB 2

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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)