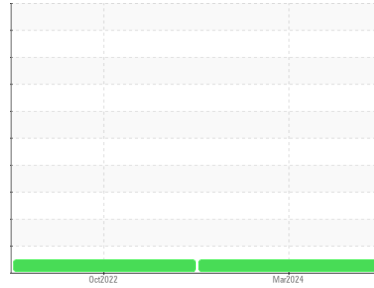




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

2641

Component

Diesel Engine

Fluid

PETRO CANADA 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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			RW0004688	RW0004115	---
Sample Date	Client Info			12 Mar 2024	24 Oct 2022	---
Machine Age	hrs	Client Info		1348	560	---
Oil Age	hrs	Client Info		436	300	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	---
Water	WC Method	>0.2		NEG	NEG	---
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	15	10	---
Chromium	ppm	ASTM D5185m	>20	<1	0	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	<1	<1	---
Aluminum	ppm	ASTM D5185m	>20	4	2	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	2	3	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		<1	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		5	10	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		64	56	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		929	862	---
Calcium	ppm	ASTM D5185m		1140	1115	---
Phosphorus	ppm	ASTM D5185m		1081	1008	---
Zinc	ppm	ASTM D5185m		1251	1198	---
Sulfur	ppm	ASTM D5185m		3269	3720	---

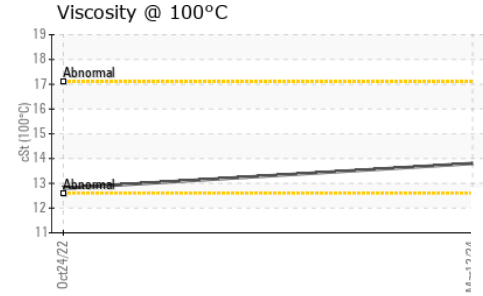
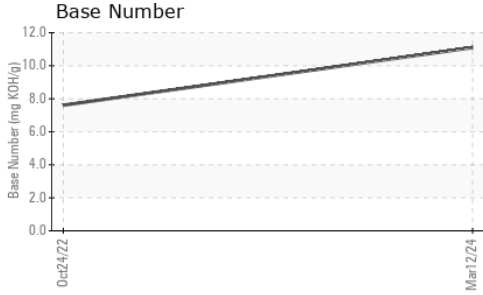
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	5	---
Sodium	ppm	ASTM D5185m		<1	<1	---
Potassium	ppm	ASTM D5185m	>20	4	3	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	7.8	8.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	20.6	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.0	15.8	---
Base Number (BN)	mg KOH/g	ASTM D2896		11.10	7.61	---



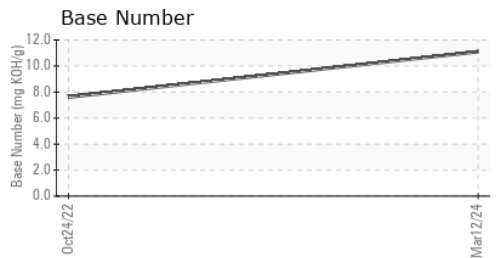
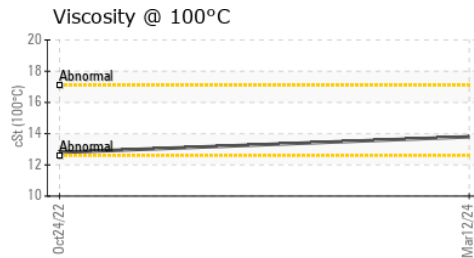
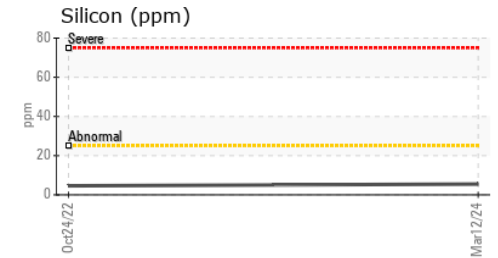
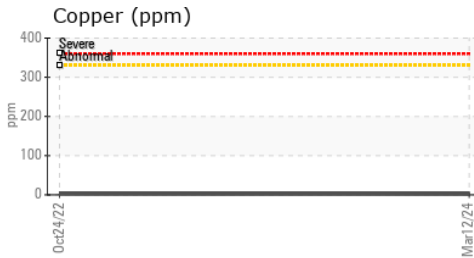
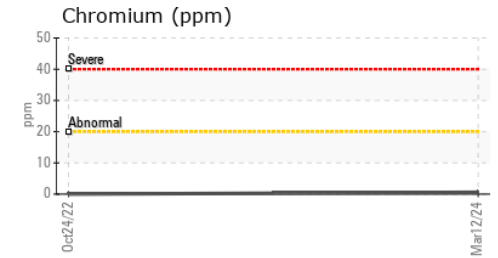
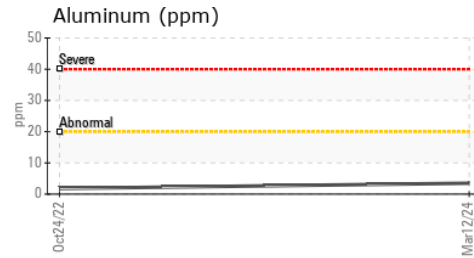
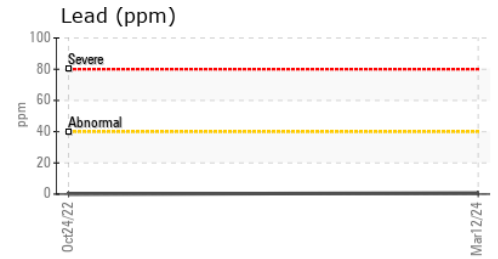
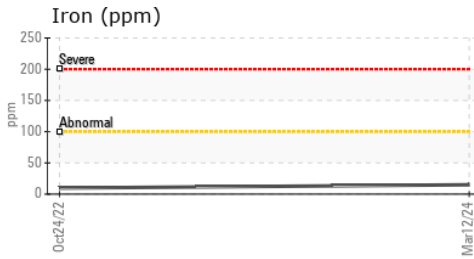
OIL ANALYSIS REPORT



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	13.8	12.8	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0004688 **Received** : 27 Mar 2024
Lab Number : **06130845** **Tested** : 28 Mar 2024
Unique Number : 10950310 **Diagnosed** : 28 Mar 2024 - Wes Davis
Test Package : MOB 2

NEWKIRK ELECTRIC
 1875 ROBERTS ST.
 MUSKEGON, MI
 US 49442

Contact: ERIC KING
ewking@newkirk-electric.com

T: (231)206-6131
F: (231)724-4090

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)