

Machine Id  
**630034**  
Component  
**Diesel Engine**  
Fluid  
**CASTROL 15W40 (--- QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0100967</b>	PCA0091966	PCA0054485
Sample Date		Client Info		<b>05 Feb 2024</b>	07 Apr 2023	22 Feb 2022
Machine Age	hrs	Client Info		<b>5644</b>	5644	5497
Oil Age	hrs	Client Info		<b>500</b>	193	46
Filter Age	hrs	Client Info		<b>500</b>	193	46
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>14</b>	20	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	0	1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	<1	4
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

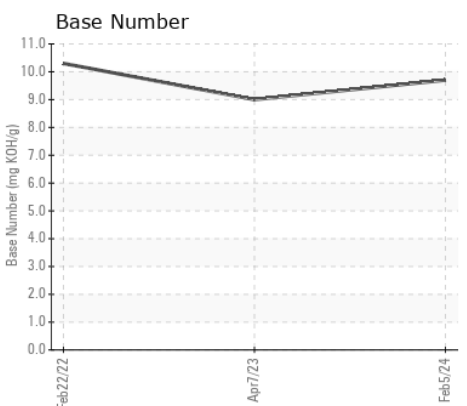
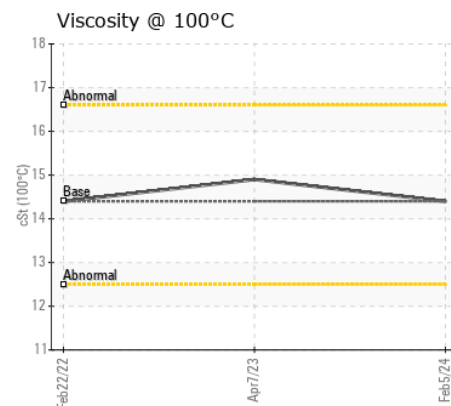
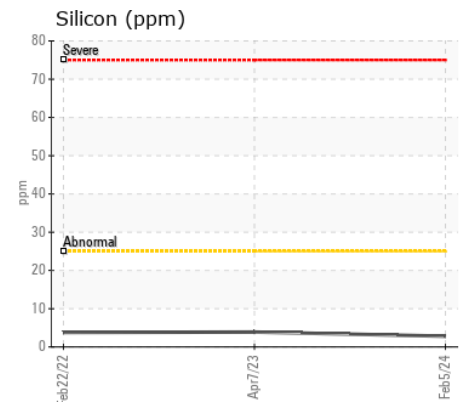
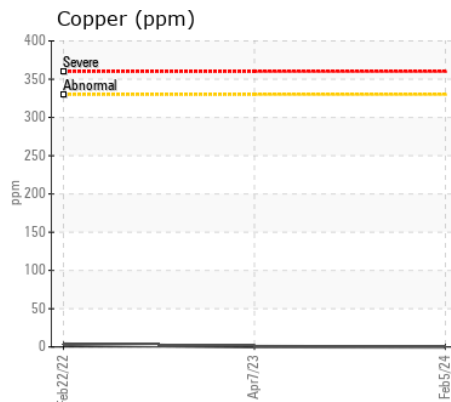
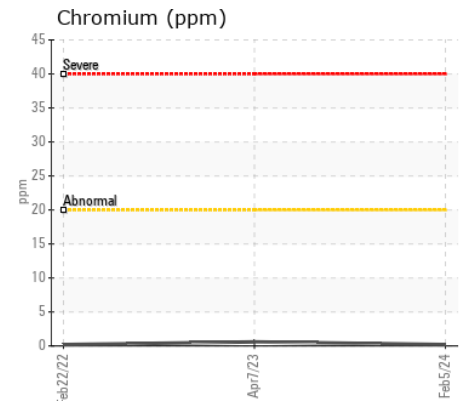
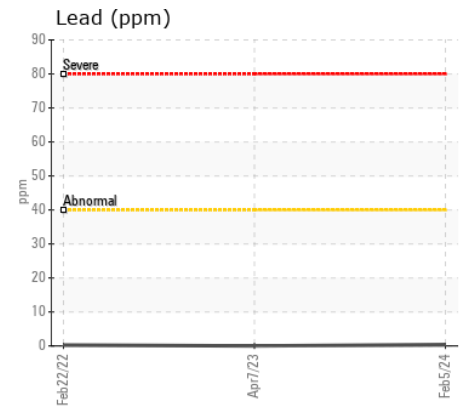
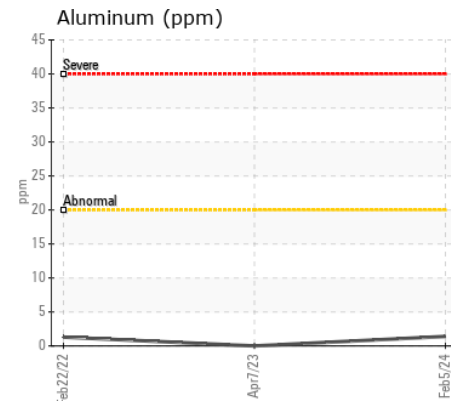
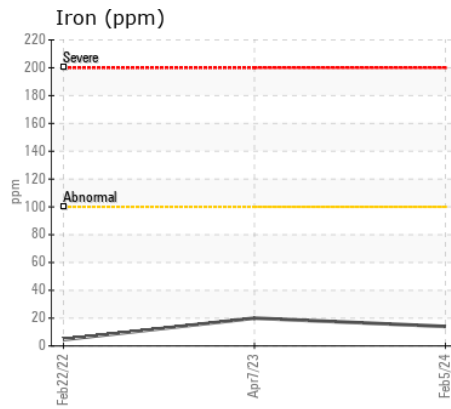
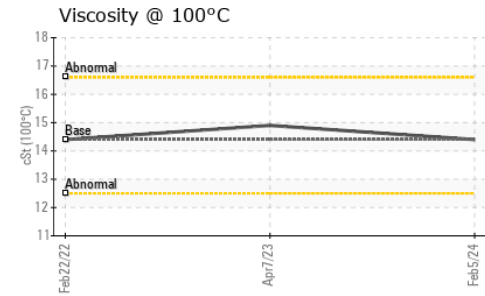
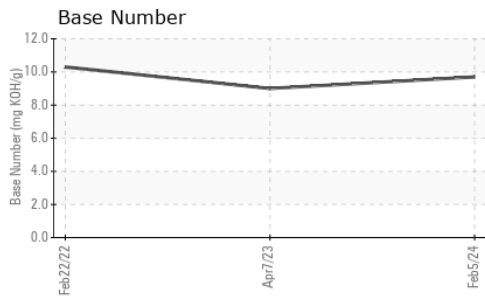
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	2
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
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.1</b>	7.8	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	19.4	20.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m	>406	<b>&lt;1</b>	0	<1
Boron	ppm	ASTM D5185m		<b>117</b>	109	99
Barium	ppm	ASTM D5185m		<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m		<b>72</b>	63	39
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>1238</b>	1012	628
Calcium	ppm	ASTM D5185m		<b>1054</b>	1032	1530
Phosphorus	ppm	ASTM D5185m		<b>1170</b>	996	1010
Zinc	ppm	ASTM D5185m		<b>1433</b>	1227	1203
Sulfur	ppm	ASTM D5185m		<b>3828</b>	3217	2630
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.5</b>	15.6	14.9
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.7</b>	9.0	10.3
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.4</b>	14.9	14.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0100967 **Received** : 26 Feb 2024  
**Lab Number** : 06099864 **Tested** : 28 Feb 2024  
**Unique Number** : 10898094 **Diagnosed** : 28 Feb 2024 - Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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)

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