



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**ROSCOE 001042**  
 Component  
**Diesel Engine**  
 Fluid  
**CASTROL VECTON 15W40 CK4 (2 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0800525</b>	WC0724536	WC0418249
Sample Date		Client Info		<b>01 Dec 2023</b>	28 Apr 2023	06 Feb 2020
Machine Age	hrs	Client Info		<b>5375</b>	5091	4519
Oil Age	hrs	Client Info		<b>284</b>	572	250
Filter Age	hrs	Client Info		<b>284</b>	572	250
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>10</b>	19	12
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>4</b>	4	1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	3	<1
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

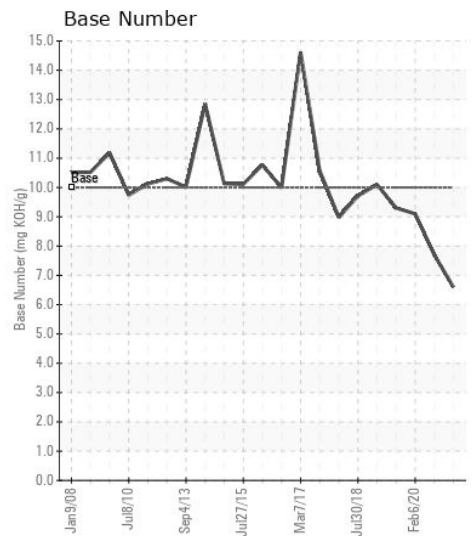
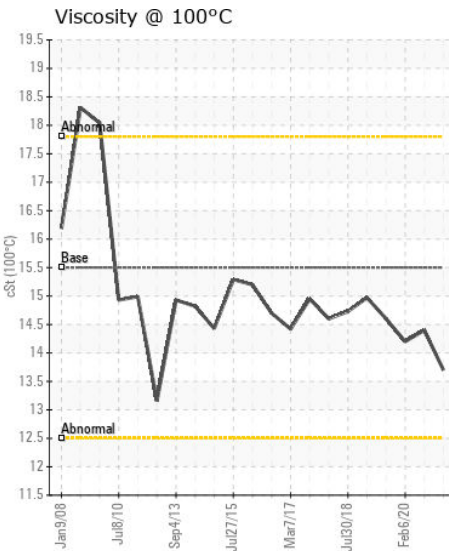
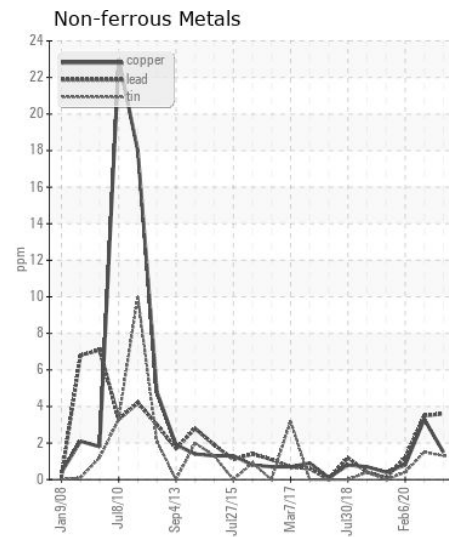
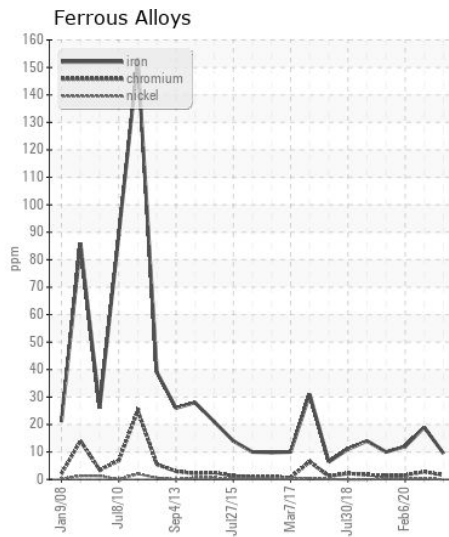
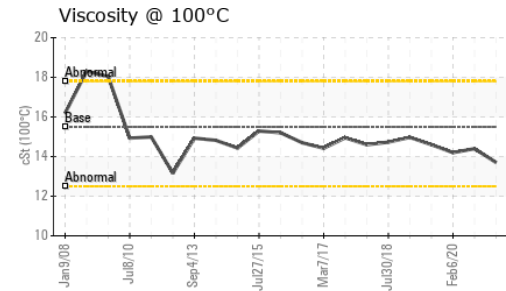
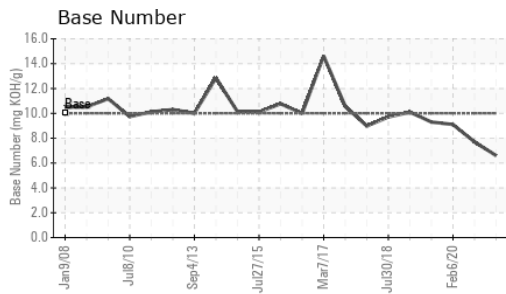
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	9	7
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	<1
Fuel		WC Method	>3.0	<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	>6	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	10.7	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	21.2	19.7
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		<b>3</b>	4	2
Boron	ppm	ASTM D5185m		<b>64</b>	102	91
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>90</b>	65	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>111</b>	339	804
Calcium	ppm	ASTM D5185m		<b>2010</b>	1958	1238
Phosphorus	ppm	ASTM D5185m		<b>1081</b>	1063	965
Zinc	ppm	ASTM D5185m		<b>1235</b>	1370	1077
Sulfur	ppm	ASTM D5185m		<b>3567</b>	3959	3326
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.7</b>	19.0	17
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>6.6</b>	7.7	9.1
Visc @ 100°C	cSt	ASTM D445	15.5	<b>13.7</b>	14.4	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0800525 **Received** : 12 Jan 2024  
**Lab Number** : 06060103 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10831485 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( 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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