



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**ROADTEC 001686**  
Component  
**Diesel Engine**  
Fluid  
**CASTROL VECTON 15W40 CK4 (5 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0856292</b>	WC0701136	WC0664816
Sample Date		Client Info		<b>28 Mar 2024</b>	29 Sep 2022	09 Jun 2022
Machine Age	hrs	Client Info		<b>5105</b>	5005	4665
Oil Age	hrs	Client Info		<b>100</b>	340	560
Filter Age	hrs	Client Info		<b>100</b>	340	560
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	>100	<b>3</b>	11	15
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	3	3
Lead	ppm	ASTM D5185m	>40	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

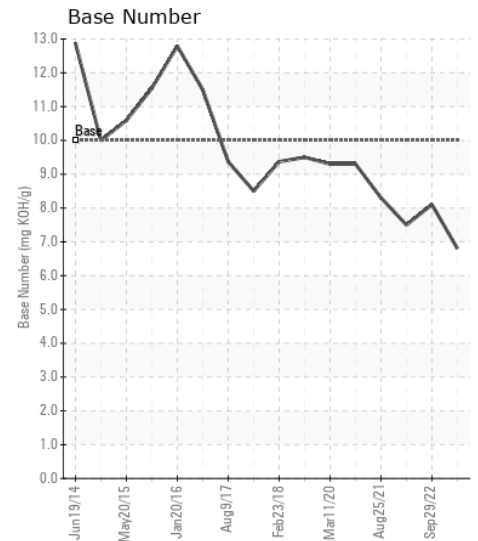
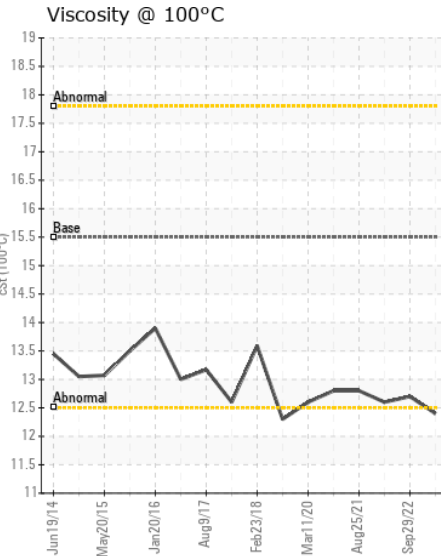
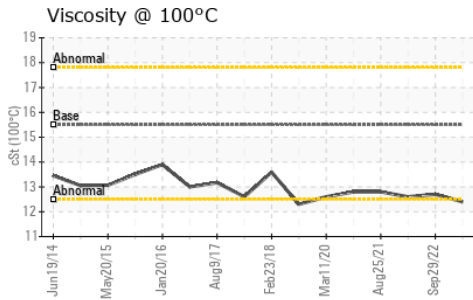
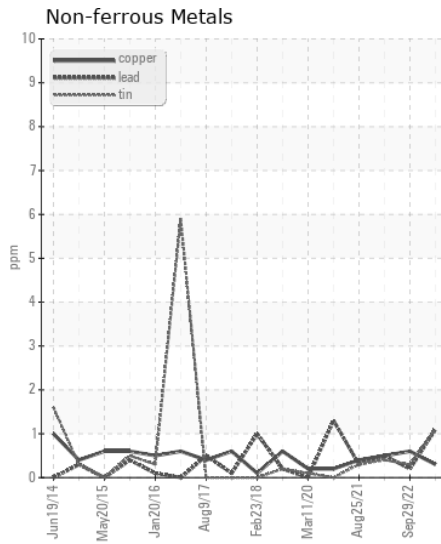
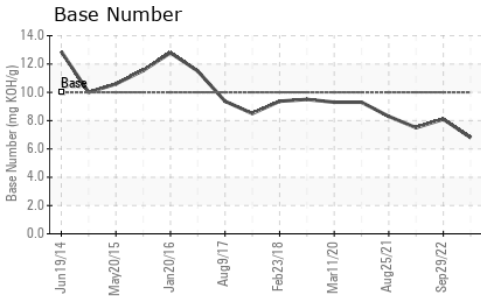
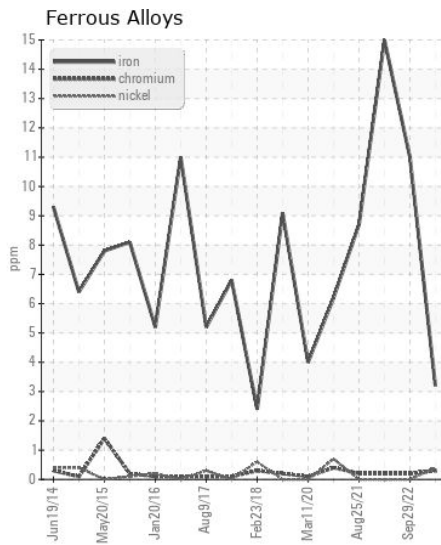
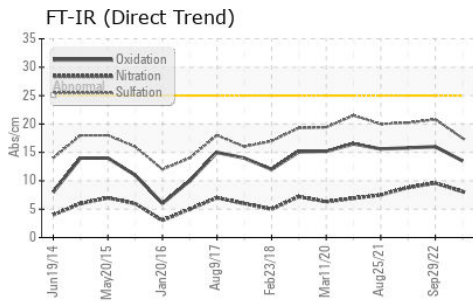
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	0
Fuel	%	ASTM D3524	>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>0.1</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	9.6	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.5</b>	20.8	20.2
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>5</b>	3	4
Boron	ppm	ASTM D5185m		<b>69</b>	58	90
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>84</b>	89	78
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>87</b>	134	241
Calcium	ppm	ASTM D5185m		<b>2110</b>	2220	2063
Phosphorus	ppm	ASTM D5185m		<b>1060</b>	1075	1004
Zinc	ppm	ASTM D5185m		<b>1107</b>	1270	1195
Sulfur	ppm	ASTM D5185m		<b>3868</b>	4516	3525
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.5</b>	16.0	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>6.8</b>	8.1	7.5
Visc @ 100°C	cSt	ASTM D445	15.5	<b>12.4</b>	12.7	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0856292 **Received** : 12 Apr 2024  
**Lab Number** : 06147954 **Tested** : 15 Apr 2024  
**Unique Number** : 10978032 **Diagnosed** : 15 Apr 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, 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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