OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH T00738
Component
Diesel Engine
Fluid
CASTROL VECTON 15W40 CK4 (36 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

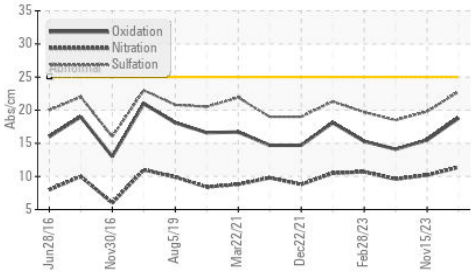
There is no indication of any contamination in the oil.

FLUID CONDITION

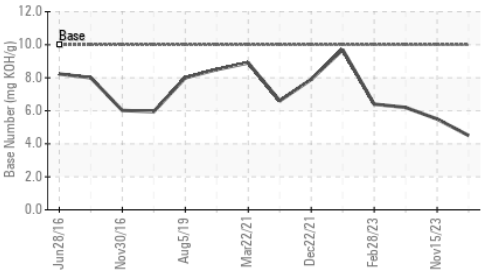
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0856288	WC0824020	WC0823855
Sample Date		Client Info		28 Mar 2024	15 Nov 2023	24 Aug 2023
Machine Age	mls	Client Info		225895	217428	211066
Oil Age	mls	Client Info		8467	6362	13718
Filter Age	mls	Client Info		8467	6362	13718
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	16	9	8
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	4
Lead	ppm	ASTM D5185m	>40	2	0	<1
Copper	ppm	ASTM D5185m	>330	1	<1	<1
Tin	ppm	ASTM D5185m	>15	1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	5	3	3
Potassium	ppm	ASTM D5185m	>20	4	0	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	11.4	10.2	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.8	19.8	18.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		5	4	5
Boron	ppm	ASTM D5185m		27	26	47
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		80	64	84
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		88	69	142
Calcium	ppm	ASTM D5185m		2019	1761	1987
Phosphorus	ppm	ASTM D5185m		930	788	948
Zinc	ppm	ASTM D5185m		987	932	1149
Sulfur	ppm	ASTM D5185m		3591	2741	4045
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.8	15.5	14.1
Base Number (BN)	mg KOH/g	ASTM D2896	10	4.5	5.5	6.2
Visc @ 100°C	cSt	ASTM D445	15.5	12.6	13.0	13.3

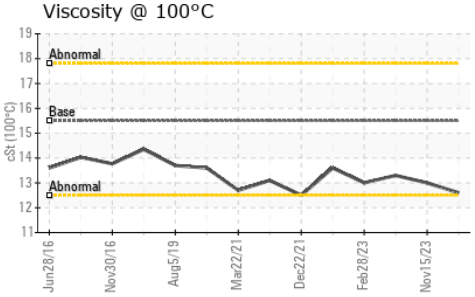
FT-IR (Direct Trend)



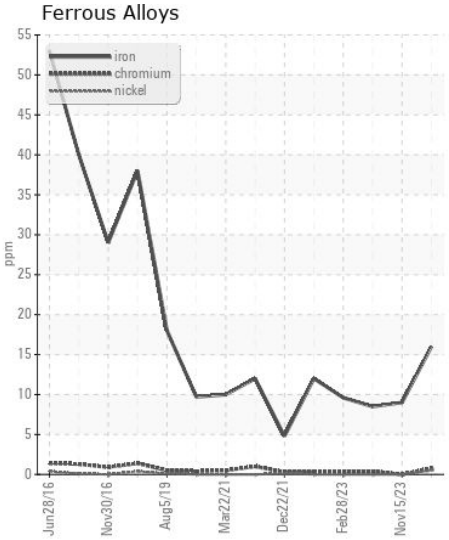
Base Number



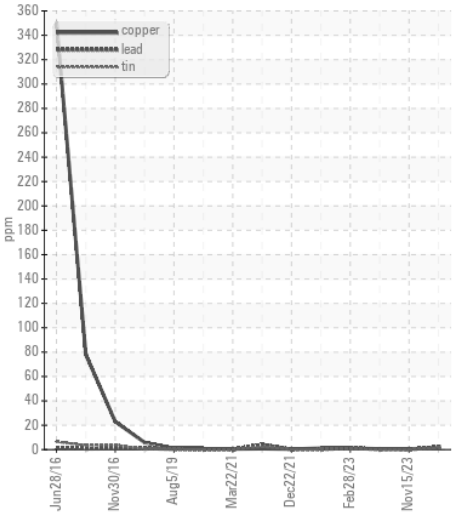
Viscosity @ 100°C



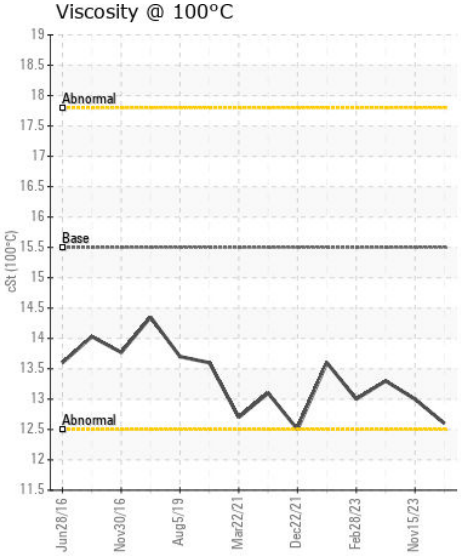
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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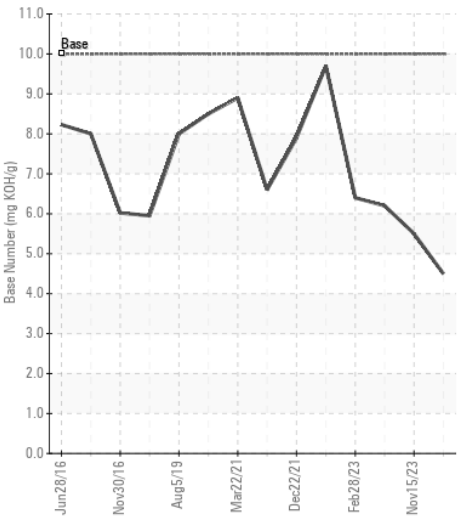

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0856288 **Received** : 12 Apr 2024
Lab Number : 06147956 **Tested** : 15 Apr 2024
Unique Number : 10978034 **Diagnosed** : 15 Apr 2024 - 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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