OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
T00781
Component
Diesel Engine
Fluid
CASTROL VECTON 15W40 CK4 (--- GAL)

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

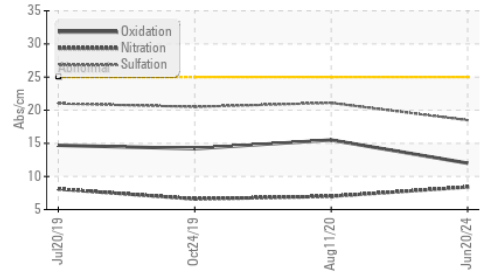
There is no indication of any contamination in the oil.

FLUID CONDITION

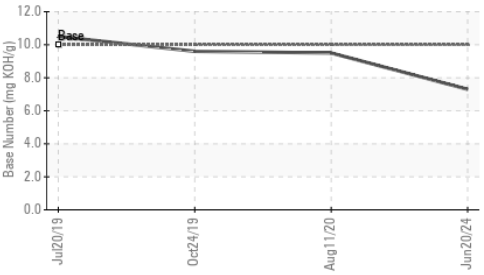
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0856170**	WC0418289	WC0363958
Sample Date		Client Info		**20 Jun 2024**	11 Aug 2020	24 Oct 2019
Machine Age	mls	Client Info		**80366**	60490	55192
Oil Age	mls	Client Info		**6000**	5000	5000
Filter Age	mls	Client Info		**6000**	5000	5000
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	**19**	12	19
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**9**	14	10
Lead	ppm	ASTM D5185m	>40	**0**	<1	<1
Copper	ppm	ASTM D5185m	>330	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>15	**0**	<1	1
Vanadium	ppm	ASTM D5185m		**0**	0	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**4**	3	4
Potassium	ppm	ASTM D5185m	>20	**16**	15	19
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	**1.1**	0.9	1.3
Nitration	Abs/cm	*ASTM D7624	>20	**8.4**	7	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	**18.5**	21.1	20.5
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		**2**	2	2
Boron	ppm	ASTM D5185m		**49**	128	87
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**81**	42	62
Manganese	ppm	ASTM D5185m		**0**	<1	1
Magnesium	ppm	ASTM D5185m		**110**	241	468
Calcium	ppm	ASTM D5185m		**2244**	2002	1737
Phosphorus	ppm	ASTM D5185m		**1024**	1006	1007
Zinc	ppm	ASTM D5185m		**1202**	1158	1155
Sulfur	ppm	ASTM D5185m		**4149**	3089	1025
Oxidation	Abs/.1mm	*ASTM D7414	>25	**12.0**	15.5	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	**7.3**	9.5	9.6
Visc @ 100°C	cSt	ASTM D445	15.5	**14.0**	14.6	14.7

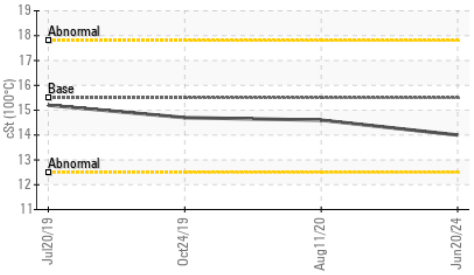
FT-IR (Direct Trend)



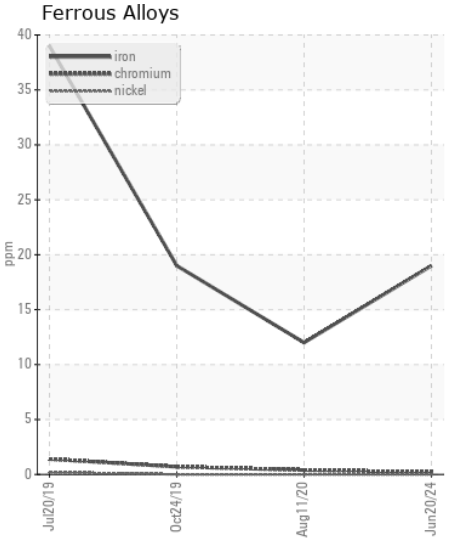
Base Number



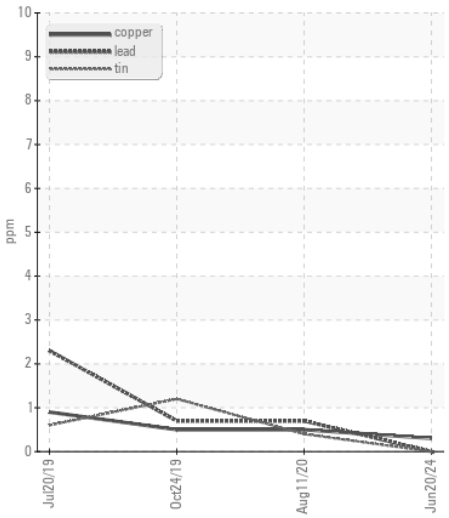
Viscosity @ 100°C



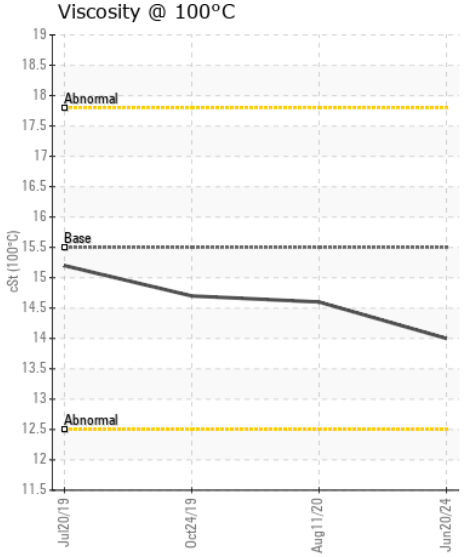
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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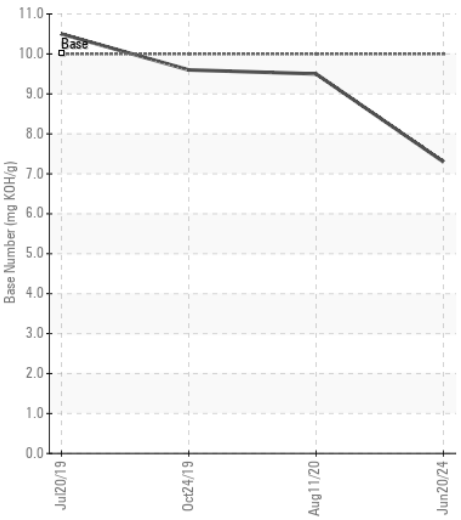

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0856170 **Received** : 09 Jul 2024
Lab Number : 06231342 **Tested** : 10 Jul 2024
Unique Number : 11114835 **Diagnosed** : 10 Jul 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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