OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
MCCLOSKEY 002428
Component
Diesel Engine
Fluid
CASTROL VECTON 15W40 CK4 (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

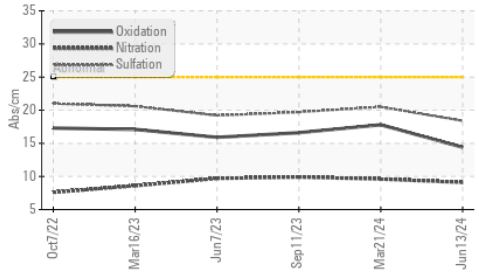
There is no indication of any contamination in the oil.

FLUID CONDITION

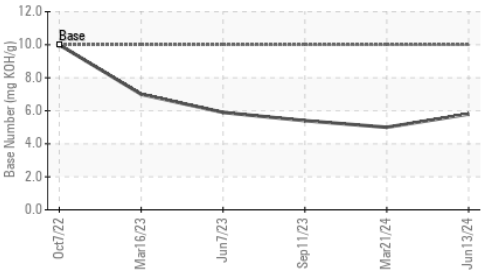
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0856244**	WC0856313	WC0823895
Sample Date		Client Info		**13 Jun 2024**	21 Mar 2024	11 Sep 2023
Machine Age	hrs	Client Info		**2874**	2485	1702
Oil Age	hrs	Client Info		**389**	783	396
Filter Age	hrs	Client Info		**389**	783	396
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	**4**	11	9
Chromium	ppm	ASTM D5185m	>20	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	<1	0
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m	>3	**0**	<1	0
Aluminum	ppm	ASTM D5185m	>20	**2**	3	3
Lead	ppm	ASTM D5185m	>40	**0**	5	2
Copper	ppm	ASTM D5185m	>330	**3**	22	55
Tin	ppm	ASTM D5185m	>15	**0**	2	<1
Vanadium	ppm	ASTM D5185m		**0**	<1	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**3**	6	5
Potassium	ppm	ASTM D5185m	>20	**<1**	2	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	**0.1**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**9.1**	9.6	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	**18.4**	20.5	19.7
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**	<1	2
Boron	ppm	ASTM D5185m		**34**	26	18
Barium	ppm	ASTM D5185m		**0**	1	0
Molybdenum	ppm	ASTM D5185m		**84**	90	88
Manganese	ppm	ASTM D5185m		**0**	1	<1
Magnesium	ppm	ASTM D5185m		**91**	84	115
Calcium	ppm	ASTM D5185m		**2310**	2084	2005
Phosphorus	ppm	ASTM D5185m		**1008**	841	836
Zinc	ppm	ASTM D5185m		**1197**	1076	1073
Sulfur	ppm	ASTM D5185m		**4015**	3094	3119
Oxidation	Abs/.1mm	*ASTM D7414	>25	**14.4**	17.8	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	10	**5.8**	5.0	5.4
Visc @ 100°C	cSt	ASTM D445	15.5	**13.2**	12.8	12.9

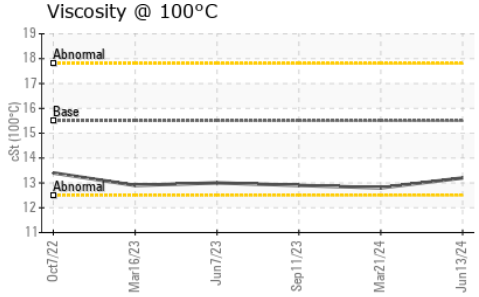
FT-IR (Direct Trend)



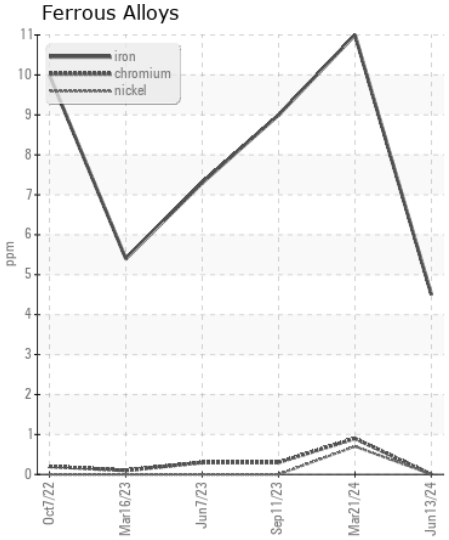
Base Number



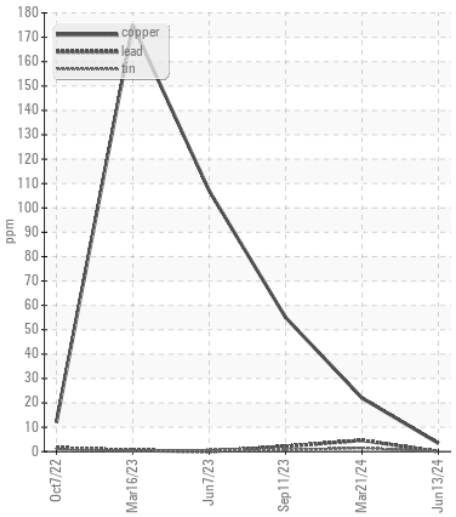
Viscosity @ 100°C



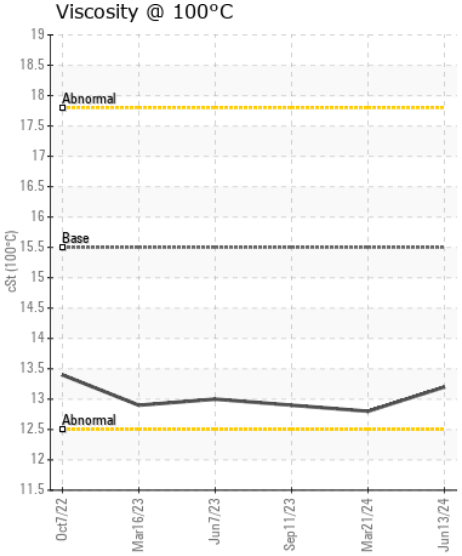
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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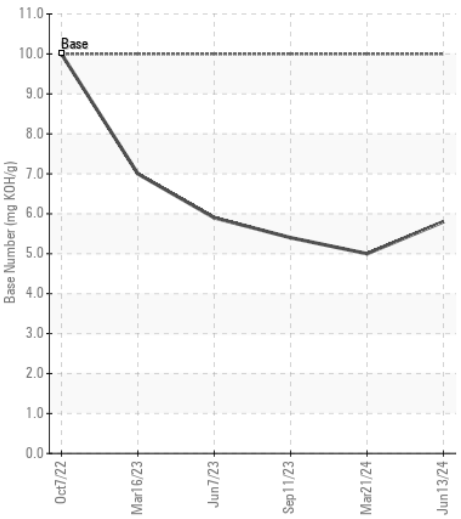

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0856244 **Received** : 09 Jul 2024
Lab Number : 06231357 **Tested** : 10 Jul 2024
Unique Number : 11114850 **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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