OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
C-6
Component
Diesel Engine
Fluid
CONOCO PHILLIPS GUARDOL ECT 15W40 (--- 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

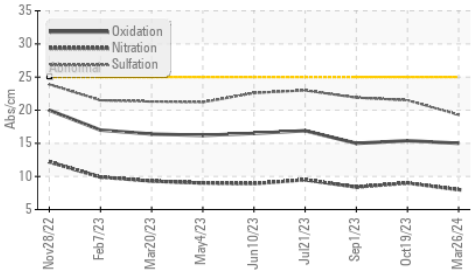
There is no indication of any contamination in the oil.

FLUID CONDITION

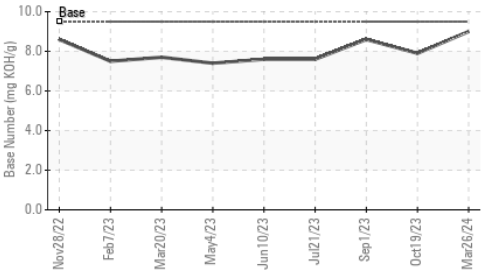
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0899838**	WC0849461	WC0849462
Sample Date		Client Info		**26 Mar 2024**	19 Oct 2023	01 Sep 2023
Machine Age	hrs	Client Info		**23743**	23366	23102
Oil Age	hrs	Client Info		**50**	264	1807
Filter Age	hrs	Client Info		**50**	264	1807
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	**5**	21	18
Chromium	ppm	ASTM D5185m	>20	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	0	0
Titanium	ppm	ASTM D5185m		**68**	68	41
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**2**	2	2
Lead	ppm	ASTM D5185m	>40	**<1**	<1	0
Copper	ppm	ASTM D5185m	>330	**24**	2	2
Tin	ppm	ASTM D5185m	>15	**2**	<1	<1
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	**7**	8	6
Potassium	ppm	ASTM D5185m	>20	**2**	5	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**	1.4	1.5
Nitration	Abs/cm	*ASTM D7624	>20	**8.0**	9.0	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	**19.3**	21.5	21.9
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		**18**	<1	3
Boron	ppm	ASTM D5185m	85	**110**	62	26
Barium	ppm	ASTM D5185m		**32**	3	0
Molybdenum	ppm	ASTM D5185m		**12**	22	36
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	350	**456**	588	821
Calcium	ppm	ASTM D5185m	1800	**1717**	1622	1468
Phosphorus	ppm	ASTM D5185m	1000	**907**	1094	1059
Zinc	ppm	ASTM D5185m	1100	**1082**	1270	1327
Sulfur	ppm	ASTM D5185m	3500	**4219**	4093	4024
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.0**	15.4	15.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	**9.0**	7.9	8.6
Visc @ 100°C	cSt	ASTM D445	15.3	**14.2**	15.3	15.8

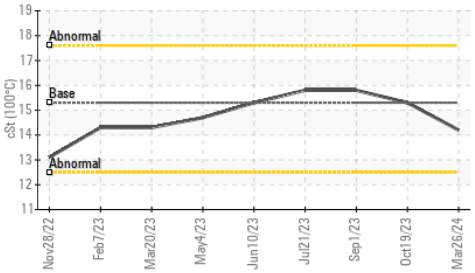
FT-IR (Direct Trend)



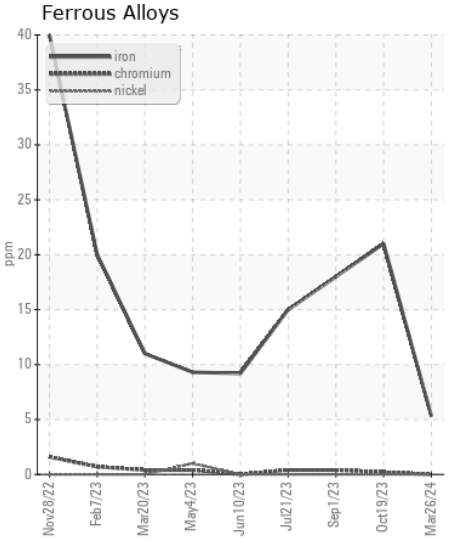
Base Number



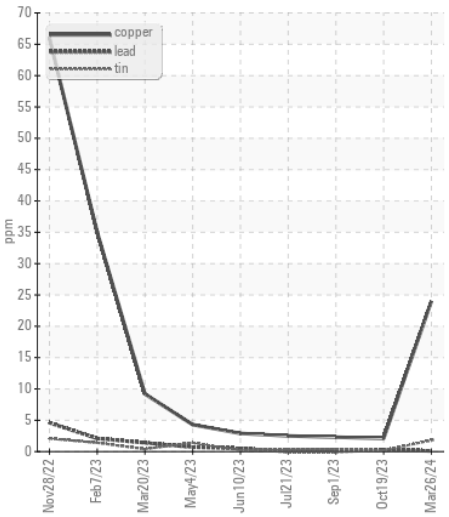
Viscosity @ 100°C



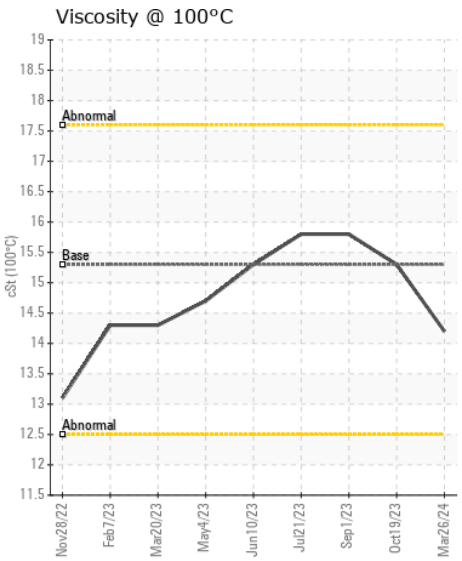
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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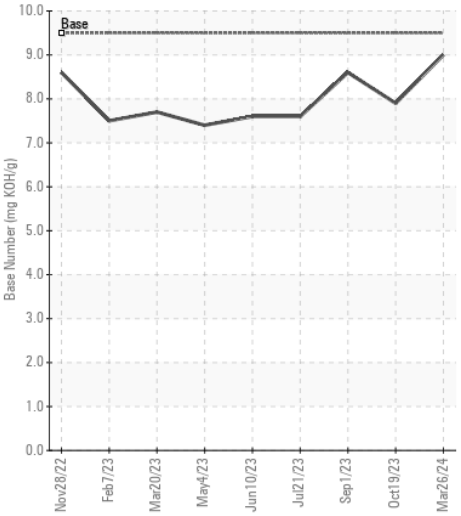

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0899838 **Received** : 16 Apr 2024
Lab Number : 06150185 **Tested** : 17 Apr 2024
Unique Number : 10980263 **Diagnosed** : 17 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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