OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
STERLING 46019
Component
Diesel Engine
Fluid
EXXON 15W40 (44 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

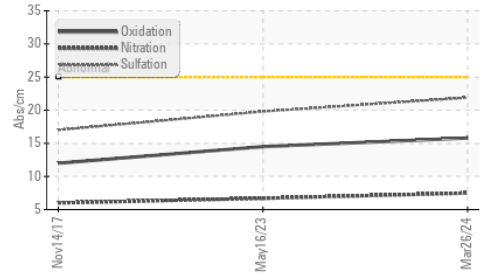
There is no indication of any contamination in the oil.

FLUID CONDITION

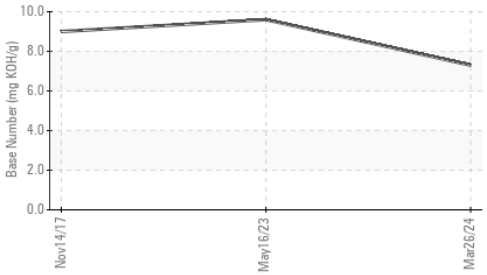
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0879993	WC0801875	WCMFC01086
Sample Date		Client Info		26 Mar 2024	16 May 2023	14 Nov 2017
Machine Age	mls	Client Info		0	0	384548
Oil Age	mls	Client Info		0	25000	0
Filter Age	mls	Client Info		0	25000	0
Oil Changed		Client Info		N/A	N/A	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	14	12	29
Chromium	ppm	ASTM D5185m	>20	1	1	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	9	12	10
Lead	ppm	ASTM D5185m	>40	2	0	<1
Copper	ppm	ASTM D5185m	>330	128	31	2
Tin	ppm	ASTM D5185m	>15	<1	1	10
Vanadium	ppm	ASTM D5185m		<1	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	18	29	0
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	0.4	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.5	6.7	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	19.8	17.
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		<1	0	3
Boron	ppm	ASTM D5185m		234	7	118
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		85	65	57
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		675	911	350
Calcium	ppm	ASTM D5185m		1529	1175	1865
Phosphorus	ppm	ASTM D5185m		1148	1017	1072
Zinc	ppm	ASTM D5185m		1487	1239	1236
Sulfur	ppm	ASTM D5185m		3789	3822	3039
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	14.5	12.
Base Number (BN)	mg KOH/g	ASTM D2896		7.3	9.6	9.00
Visc @ 100°C	cSt	ASTM D445	14.4	13.5	13.0	13.65

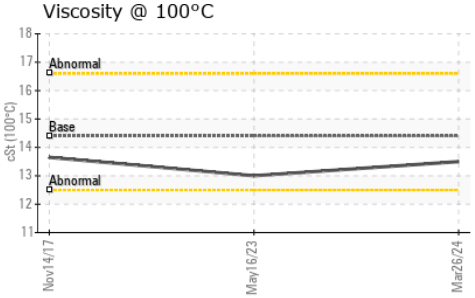
FT-IR (Direct Trend)



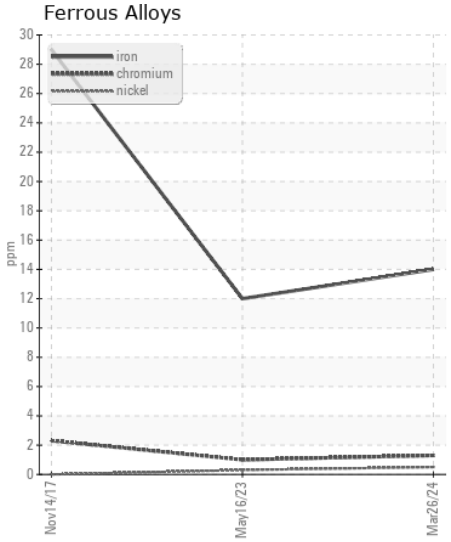
Base Number



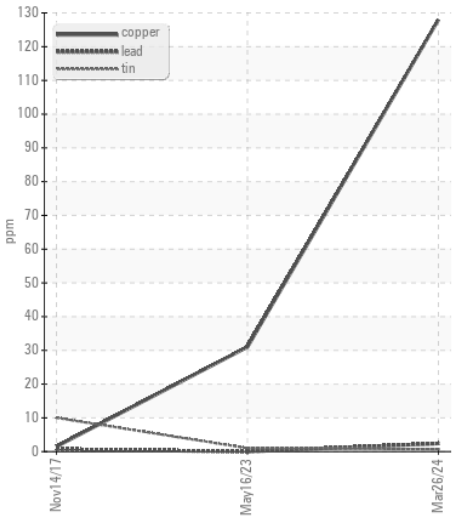
Viscosity @ 100°C



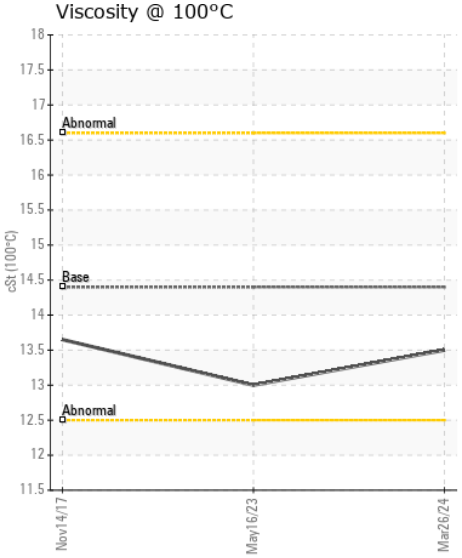
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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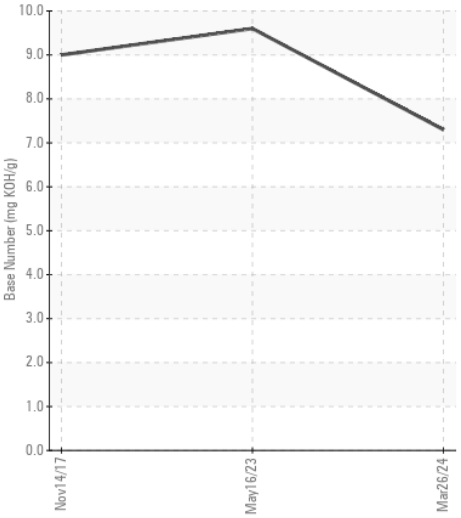

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0879993
Lab Number : 06145733
Unique Number : 10970541
Test Package : FLEET

Received : 11 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 14 Apr 2024 - Don Baldridge

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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