



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
29386
 Component
Diesel Engine
 Fluid
EXXON 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0912523	WC0796022	WC0745136
Sample Date		Client Info		31 Mar 2024	08 May 2023	04 Nov 2022
Machine Age	mls	Client Info		153941	55751	19447
Oil Age	mls	Client Info		0	17000	19447
Filter Age	mls	Client Info		0	17000	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	8	19	31
Chromium	ppm	ASTM D5185m	>20	<1	2	2
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	1
Aluminum	ppm	ASTM D5185m	>20	3	14	80
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	4	320	226
Tin	ppm	ASTM D5185m	>15	<1	1	4
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

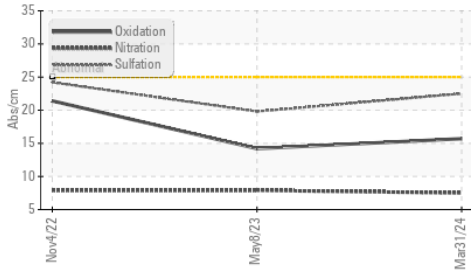
Silicon	ppm	ASTM D5185m	>25	4	5	6
Potassium	ppm	ASTM D5185m	>20	4	32	214
Fuel		WC Method	>5	<1.0	<1.0	0.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.5	7.9	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	19.8	24.2
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

FLUID CONDITION

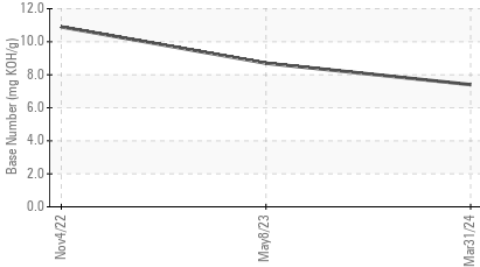
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	1	3
Boron	ppm	ASTM D5185m		310	7	41
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		75	70	47
Manganese	ppm	ASTM D5185m		<1	<1	4
Magnesium	ppm	ASTM D5185m		443	966	575
Calcium	ppm	ASTM D5185m		1272	1124	1619
Phosphorus	ppm	ASTM D5185m		987	986	768
Zinc	ppm	ASTM D5185m		1177	1209	945
Sulfur	ppm	ASTM D5185m		3462	3327	2780
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	14.2	21.4
Base Number (BN)	mg KOH/g	ASTM D2896		7.4	8.7	10.9
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	12.6	10.3

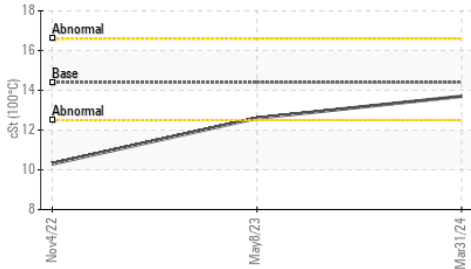
FT-IR (Direct Trend)



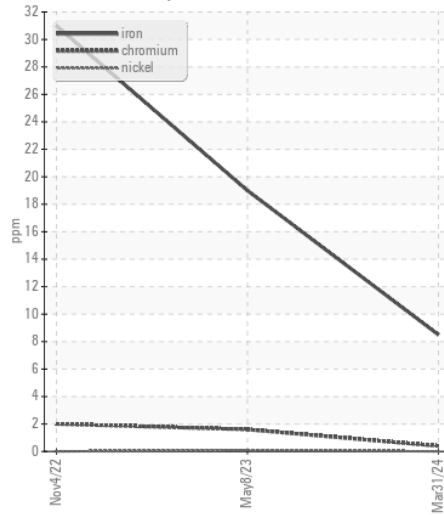
Base Number



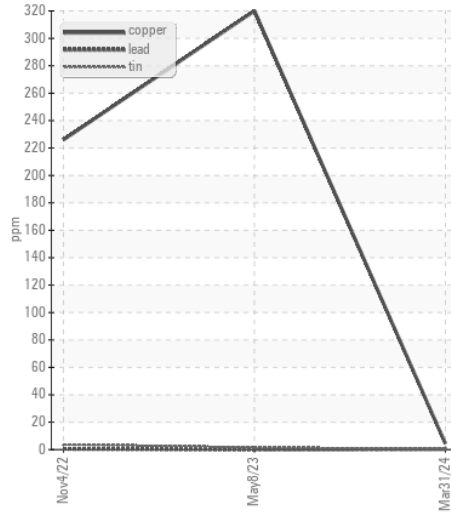
Viscosity @ 100°C



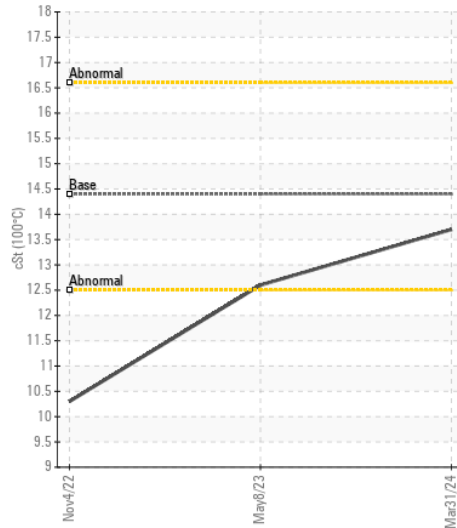
Ferrous Alloys



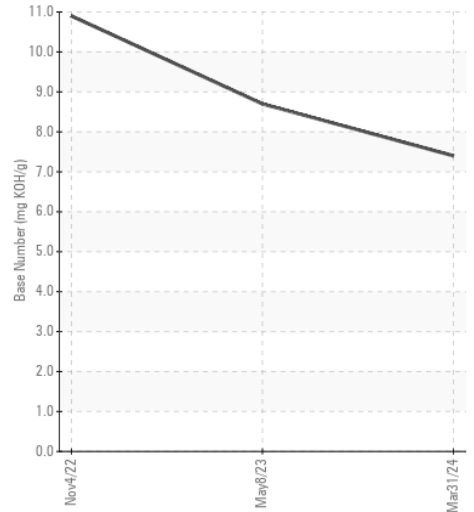
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0912523
Lab Number : 06153634
Unique Number : 10983712
Test Package : FLEET

Received : 18 Apr 2024
Tested : 19 Apr 2024
Diagnosed : 23 Apr 2024 - Don Baldrige

SALEM NATIONALEASE CORPORATION
 198 PARK PLAZA DRIVE
 WINSTON SALEM, NC
 US 27105

Contact: Audrey Hopkins
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 T: (336)767-9642

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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