



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
167758
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0904499	WC0815423	WC0790116
Sample Date		Client Info		30 May 2024	16 Jun 2023	13 Mar 2023
Machine Age	mls	Client Info		25000	0	173932
Oil Age	mls	Client Info		25000	25000	10000
Filter Age	mls	Client Info		25000	25000	10000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	8	16	12
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	1	1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	<1	2
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	2	4	4
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	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.

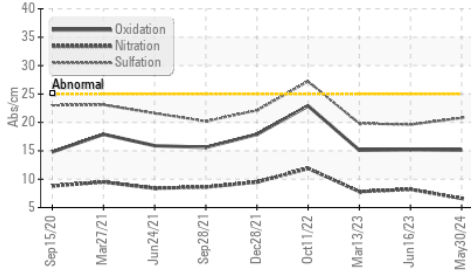
Silicon	ppm	ASTM D5185m	>25	4	4	6
Potassium	ppm	ASTM D5185m	>20	1	3	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	6.6	8.2	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	19.6	19.8
Silt	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

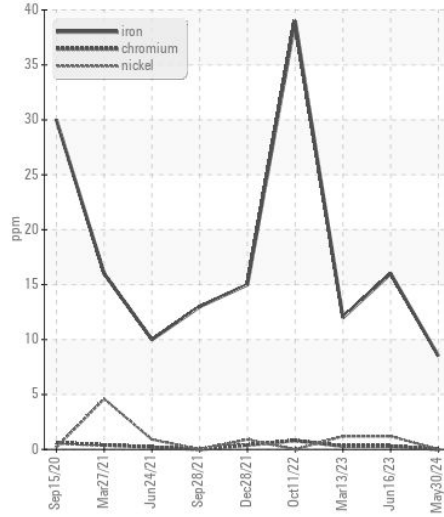
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	2	2	2
Boron	ppm	ASTM D5185m		309	<1	<1
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		80	63	60
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		432	1019	974
Calcium	ppm	ASTM D5185m		1264	1126	1156
Phosphorus	ppm	ASTM D5185m		1031	1018	967
Zinc	ppm	ASTM D5185m		1182	1249	1269
Sulfur	ppm	ASTM D5185m		3492	3900	3675
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	15.2	15.1
Base Number (BN)	mg KOH/g	ASTM D2896		6.6	9.1	9.1
Visc @ 100°C	cSt	ASTM D445		12.9	13.0	12.8

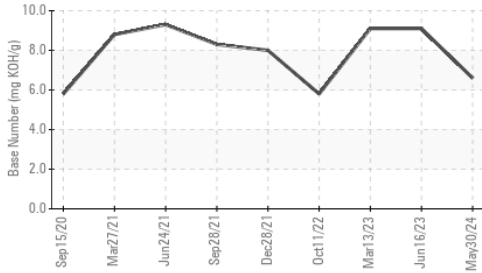
FT-IR (Direct Trend)



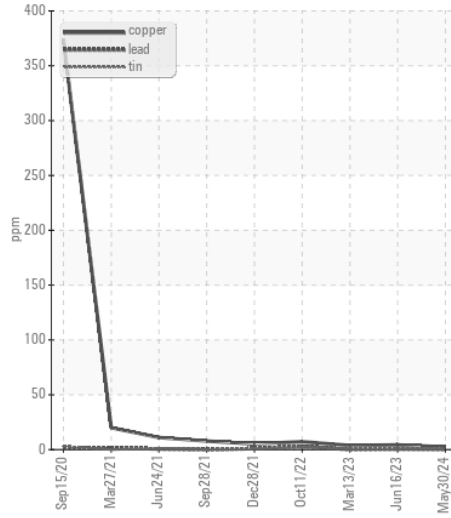
Ferrous Alloys



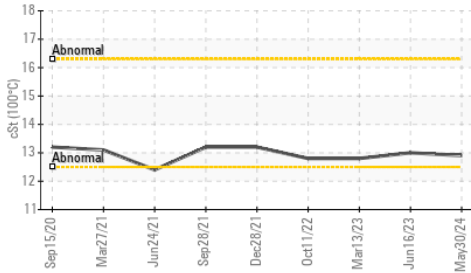
Base Number



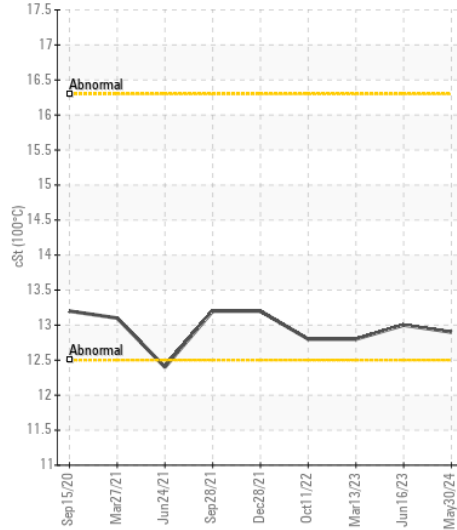
Non-ferrous Metals



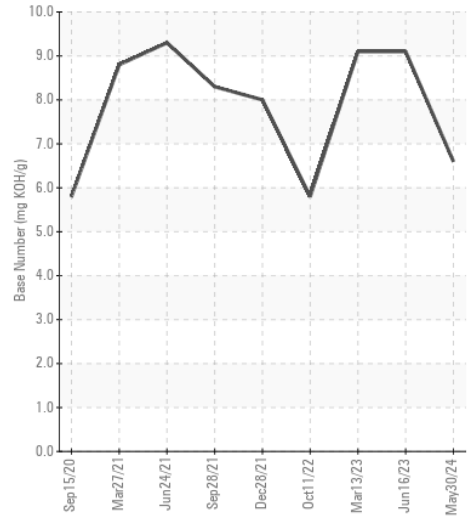
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0904499
Lab Number : 06196445
Unique Number : 11058568
Test Package : FLEET

Received : 31 May 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Wes Davis

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