OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
6364
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.

CONTAMINATION

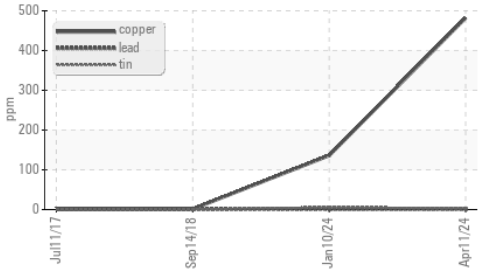
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

FLUID CONDITION

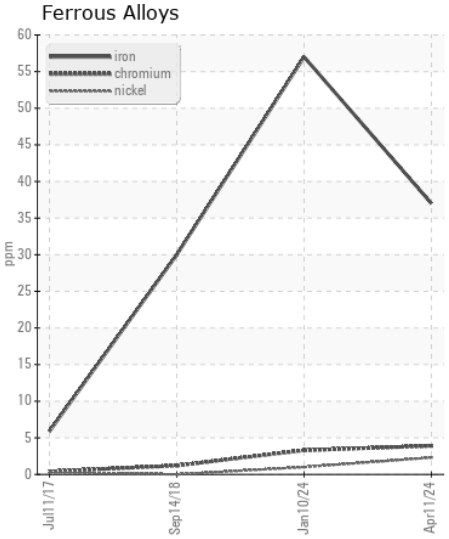
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0867009**	WC0866980	WCMFC13891
Sample Date		Client Info		**11 Apr 2024**	10 Jan 2024	14 Sep 2018
Machine Age	hrs	Client Info		**41297**	24404	184242
Oil Age	hrs	Client Info		**17000**	24404	0
Filter Age	hrs	Client Info		**17000**	24404	0
Oil Changed		Client Info		**Changed**	Changed	N/A
Filter Changed		Client Info		**Changed**	Changed	N/A
Sample Status				**ABNORMAL**	ATTENTION	NORMAL
Iron	ppm	ASTM D5185m	>100	**37**	57	30
Chromium	ppm	ASTM D5185m	>20	**4**	3	1
Nickel	ppm	ASTM D5185m	>4	**2**	1	0
Titanium	ppm	ASTM D5185m		**<1**	0	<1
Silver	ppm	ASTM D5185m	>3	**1**	<1	0
Aluminum	ppm	ASTM D5185m	>20	**50**	81	10
Lead	ppm	ASTM D5185m	>40	**1**	1	<1
Copper	ppm	ASTM D5185m	>330	▲ **482**	136	1
Tin	ppm	ASTM D5185m	>15	**3**	6	0
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	**11**	8	9
Potassium	ppm	ASTM D5185m	>20	**115**	210	8
Fuel		WC Method	>5	**<1.0**	0.2	0.1
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>3	**0.3**	0.4	1.2
Nitration	Abs/cm	*ASTM D7624	>20	**7.5**	8.9	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.5**	22.7	23.7
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	>118	**5**	6	3
Boron	ppm	ASTM D5185m		**491**	36	27
Barium	ppm	ASTM D5185m		**<1**	0	<1
Molybdenum	ppm	ASTM D5185m		**124**	43	69
Manganese	ppm	ASTM D5185m		**3**	4	<1
Magnesium	ppm	ASTM D5185m		**605**	547	473
Calcium	ppm	ASTM D5185m		**2084**	1659	2045
Phosphorus	ppm	ASTM D5185m		**1593**	692	1099
Zinc	ppm	ASTM D5185m		**1766**	829	1320
Sulfur	ppm	ASTM D5185m		**5020**	1909	2904
Oxidation	Abs/.1mm	*ASTM D7414	>25	**16.8**	21.5	20.1
Base Number (BN)	mg KOH/g	ASTM D2896		**6.9**	7.9	9.6
Visc @ 100°C	cSt	ASTM D445		**13.0**	10.0	14.66

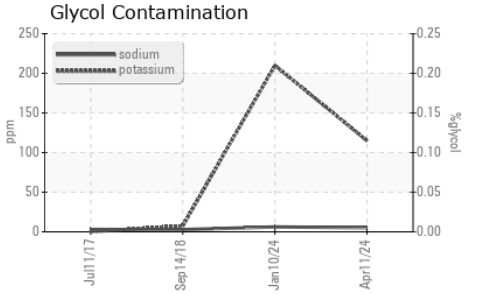
Non-ferrous Metals



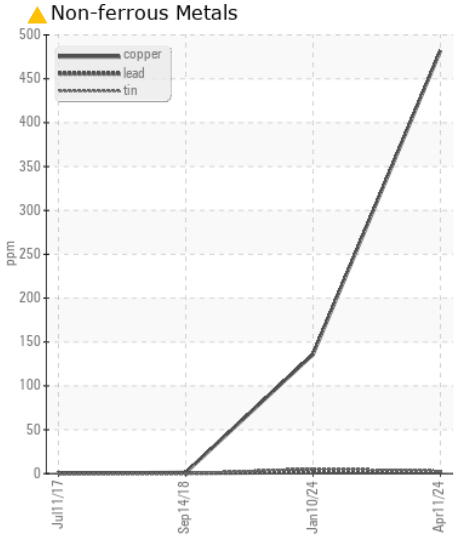
Ferrous Alloys



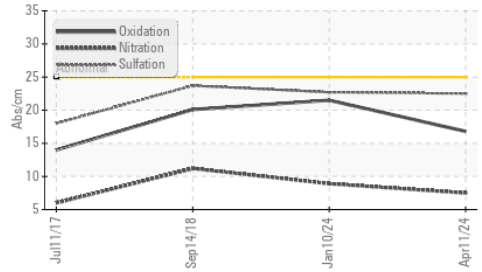
Glycol Contamination



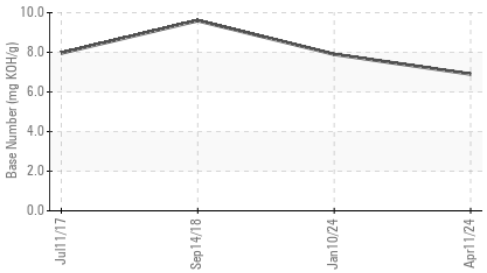
Non-ferrous Metals



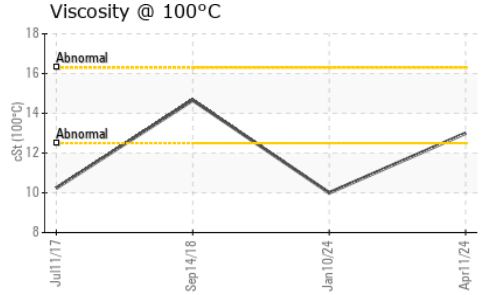
FT-IR (Direct Trend)



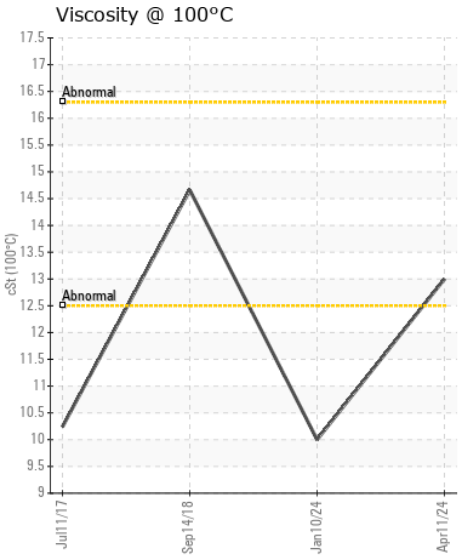
Base Number



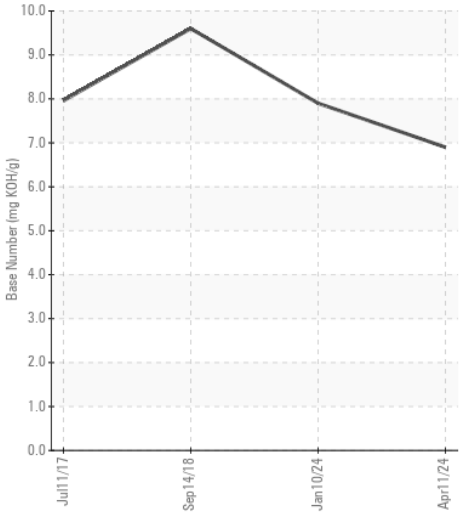
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0867009
Lab Number : 06152557
Unique Number : 10982635
Test Package : FLEET

Received : 17 Apr 2024
Tested : 18 Apr 2024
Diagnosed : 22 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)

SALEM NATIONALEASE CORPORATION
198 PARK PLAZA DRIVE
WINSTON SALEM, NC
US 27105
Contact: Audrey Hopkins
Audrey.Hopkins@salemcorp.com
T: (336)767-9642
F: x: