



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
18356
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

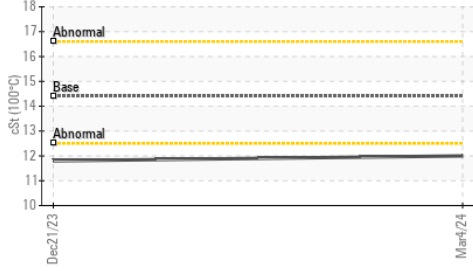
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

FLUID CONDITION

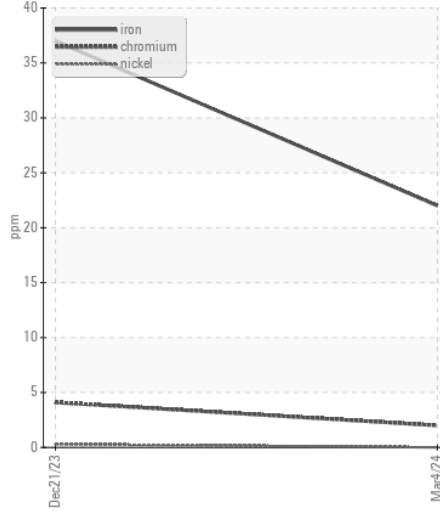
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0903317	WC0852254	---
Sample Date		Client Info		04 Mar 2024	21 Dec 2023	---
Machine Age	mls	Client Info		0	45676	---
Oil Age	mls	Client Info		0	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ATTENTION	ATTENTION	---
Iron	ppm	ASTM D5185m	>100	22	37	---
Chromium	ppm	ASTM D5185m	>20	2	4	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	54	89	---
Lead	ppm	ASTM D5185m	>40	1	0	---
Copper	ppm	ASTM D5185m	>330	140	239	---
Tin	ppm	ASTM D5185m	>15	<1	2	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	5	5	---
Potassium	ppm	ASTM D5185m	>20	105	191	---
Fuel		WC Method	>5	<1.0	0.2	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.4	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	20.9	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>158	2	2	---
Boron	ppm	ASTM D5185m	250	171	10	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	86	77	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m	450	604	882	---
Calcium	ppm	ASTM D5185m	3000	1409	1148	---
Phosphorus	ppm	ASTM D5185m	1150	1029	1002	---
Zinc	ppm	ASTM D5185m	1350	1225	1173	---
Sulfur	ppm	ASTM D5185m	4250	3267	2378	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	18.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.6	7.8	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.0	11.8	---

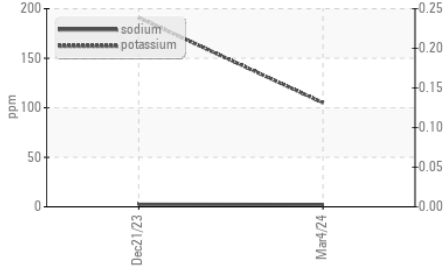
● Viscosity @ 100°C



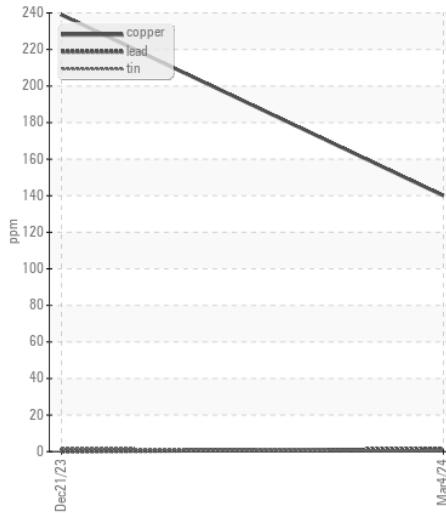
Ferrous Alloys



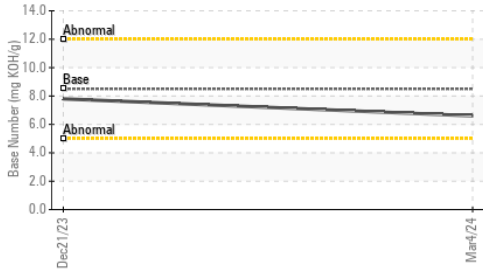
Glycol Contamination



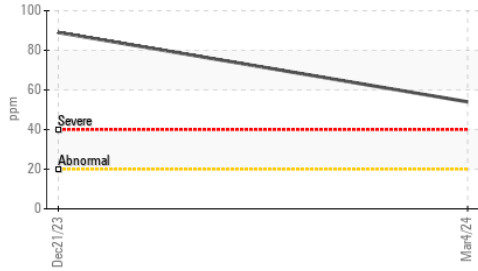
Non-ferrous Metals



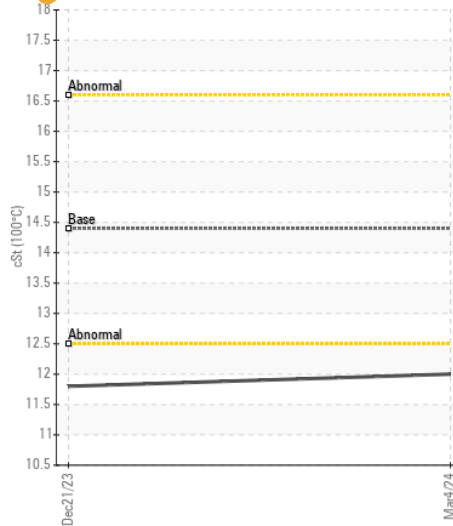
Base Number



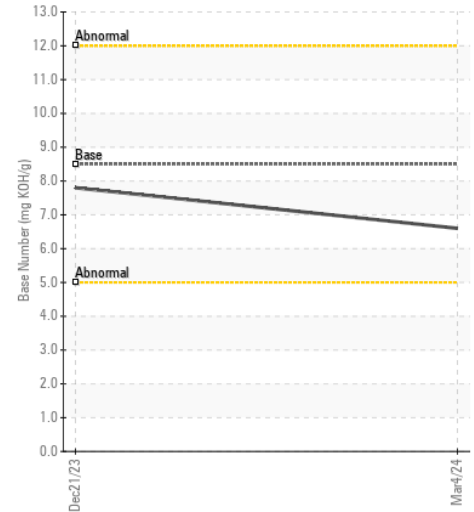
Aluminum (ppm)



● Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0903317

Lab Number : 06123044

Unique Number : 10937195

Test Package : FLEET

Received : 19 Mar 2024

Tested : 20 Mar 2024

Diagnosed : 21 Mar 2024 - Don Baldrige

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:

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)