



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 12249
Component
Front Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (42 QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0913857	WCM1300877	WCMFA62756
Sample Date		Client Info		03 Apr 2024	13 May 2021	18 Mar 2013
Machine Age	mls	Client Info		11706	0	559241
Oil Age	mls	Client Info		11706	0	20000
Filter Age	mls	Client Info		11706	0	20000
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	14	44	35
Chromium	ppm	ASTM D5185m	>6	<1	<1	2
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>30	5	4	2
Lead	ppm	ASTM D5185m	>10	<1	<1	1
Copper	ppm	ASTM D5185m	>150	0	12	6
Tin	ppm	ASTM D5185m	>4	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

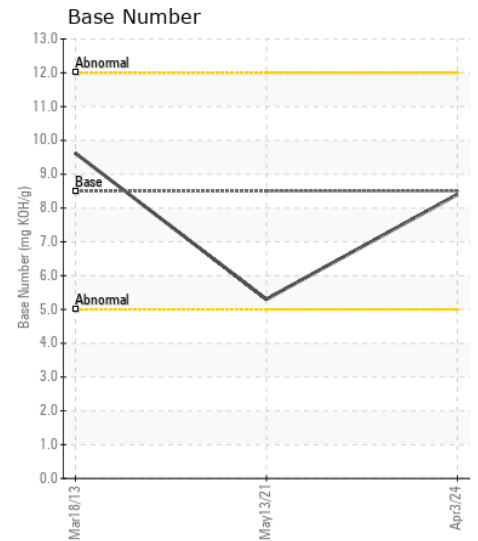
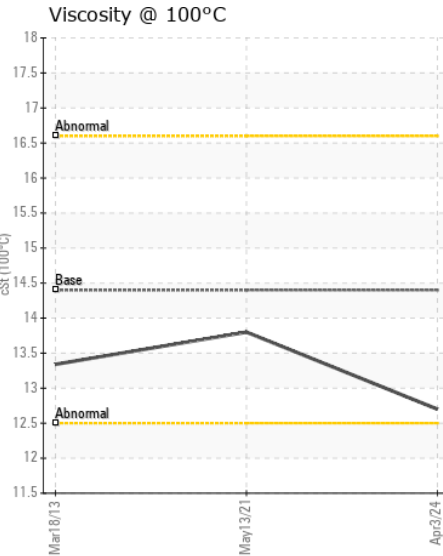
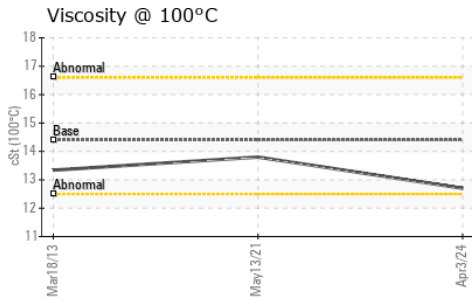
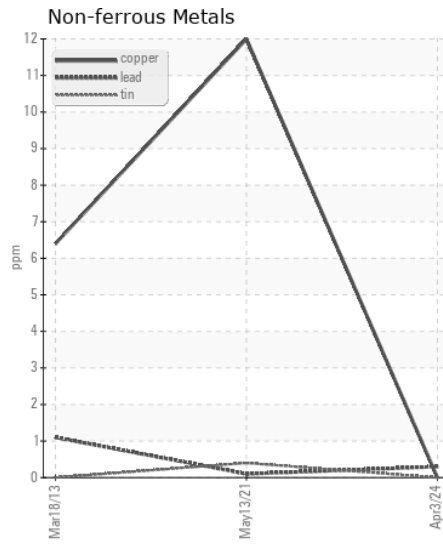
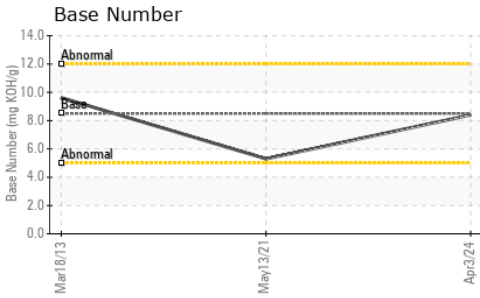
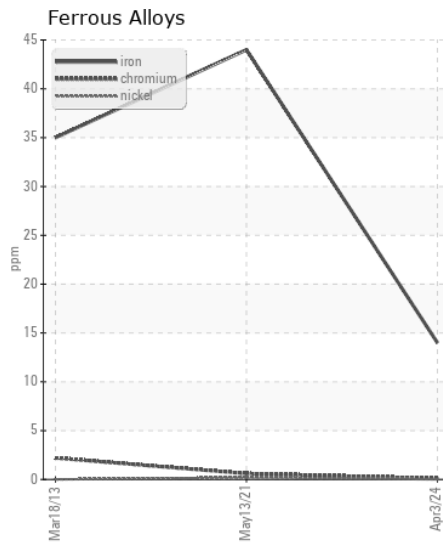
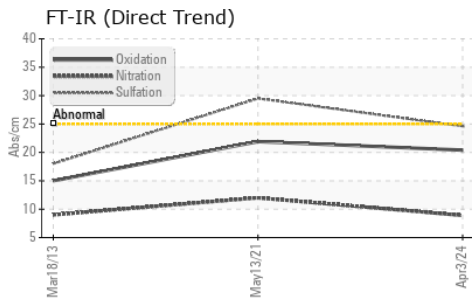
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	8	3
Potassium	ppm	ASTM D5185m	>20	2	10	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	0.5	0.8	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.9	12	9.
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	29.5	18.
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	>158	0	<1	15
Boron	ppm	ASTM D5185m	250	294	6	6
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	129	2	39
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	736	16	780
Calcium	ppm	ASTM D5185m	3000	1744	2354	1217
Phosphorus	ppm	ASTM D5185m	1150	836	875	985
Zinc	ppm	ASTM D5185m	1350	1001	989	1189
Sulfur	ppm	ASTM D5185m	4250	3223	2952	2936
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	21.9	15.
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.4	5.3	9.62
Visc @ 100°C	cSt	ASTM D445	14.4	12.7	13.8	13.34



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0913857
Lab Number : 06193351
Unique Number : 11050103
Test Package : FLEET

Received : 28 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Wes Davis

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

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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)