



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
19002
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample. 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		WC0883252	WC0795971	WC0796010
Sample Date		Client Info		26 Jan 2024	22 Sep 2023	26 Jun 2023
Machine Age	mls	Client Info		0	171921	144488
Oil Age	mls	Client Info		15000	25000	27000
Filter Age	mls	Client Info		15000	0	27000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	15	25	22
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	4	1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	3	6	10
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

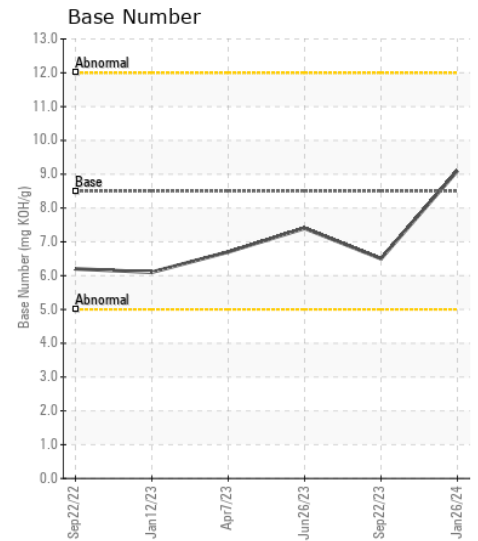
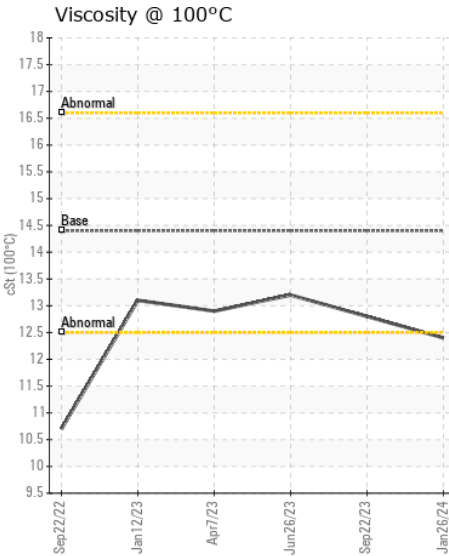
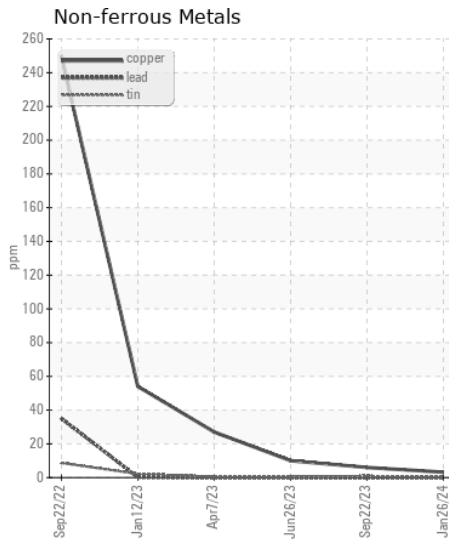
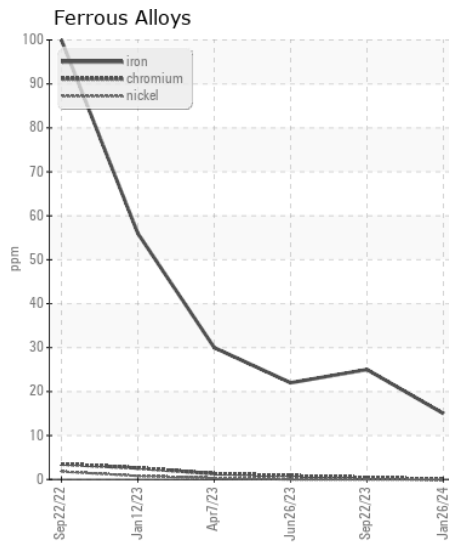
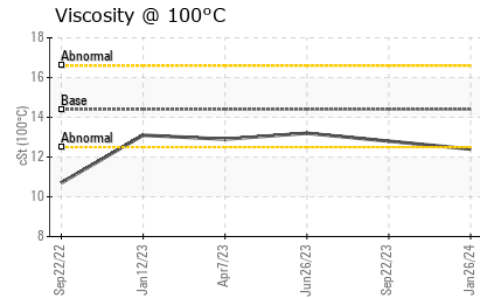
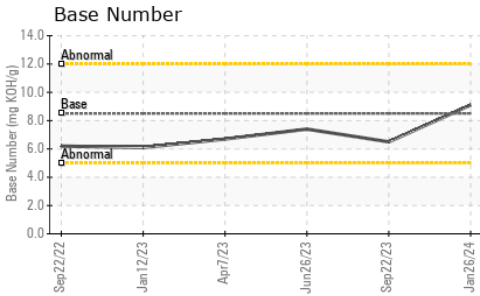
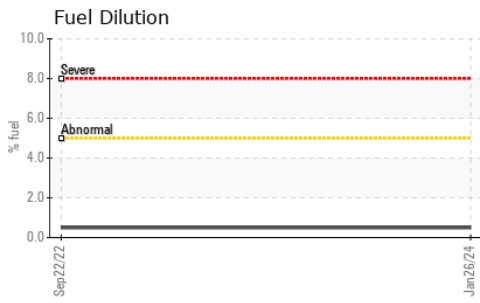
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	4	4
Potassium	ppm	ASTM D5185m	>20	5	7	7
Fuel	%	ASTM D3524	>5	0.5	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.9	0.8
Nitration	Abs/cm	*ASTM D7624	>20	7.8	11.0	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	23.5	24.4
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	2	4	1
Boron	ppm	ASTM D5185m	250	49	0	2
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	75	69	64
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	844	986	1054
Calcium	ppm	ASTM D5185m	3000	1076	1130	1212
Phosphorus	ppm	ASTM D5185m	1150	949	1008	1032
Zinc	ppm	ASTM D5185m	1350	1072	1252	1335
Sulfur	ppm	ASTM D5185m	4250	2925	2727	3376
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	21.6	22.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.1	6.5	7.4
Visc @ 100°C	cSt	ASTM D445	14.4	12.4	12.8	13.2



Certificate L2367

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

Sample No. : WC0883252

Lab Number : 06077513

Unique Number : 10859604

Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 01 Feb 2024

Tested : 05 Feb 2024

Diagnosed : 05 Feb 2024 - Wes Davis

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE

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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)