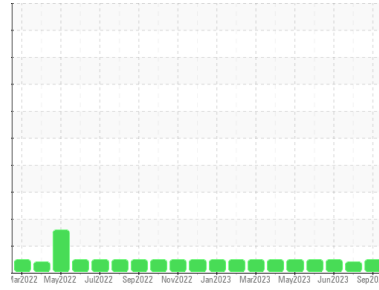




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
GEORGIA
 Machine Id
5566

Component
Diesel Engine
 Fluid

CAM2 MAGUM SUPER HD 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0857180	WC0754718	WC0754699
Sample Date	Client Info		11 Sep 2023	01 Aug 2023	06 Jun 2023
Machine Age	mls	Client Info	53120	49643	47282
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			NORMAL	ATTENTION	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	33	80	88
Chromium	ppm	ASTM D5185m >20	2	6	6
Nickel	ppm	ASTM D5185m >4	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	19	55	54
Lead	ppm	ASTM D5185m >40	<1	0	<1
Copper	ppm	ASTM D5185m >330	6	4	5
Tin	ppm	ASTM D5185m >15	1	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<1	35	32
Barium	ppm	ASTM D5185m	0	<1	0
Molybdenum	ppm	ASTM D5185m	68	32	37
Manganese	ppm	ASTM D5185m	2	3	3
Magnesium	ppm	ASTM D5185m	1098	377	373
Calcium	ppm	ASTM D5185m	1191	1776	1777
Phosphorus	ppm	ASTM D5185m	1106	784	780
Zinc	ppm	ASTM D5185m	1406	1021	996
Sulfur	ppm	ASTM D5185m	3182	3290	2709

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	13	15
Sodium	ppm	ASTM D5185m	4	4	2
Potassium	ppm	ASTM D5185m >20	4	156	177

INFRA-RED

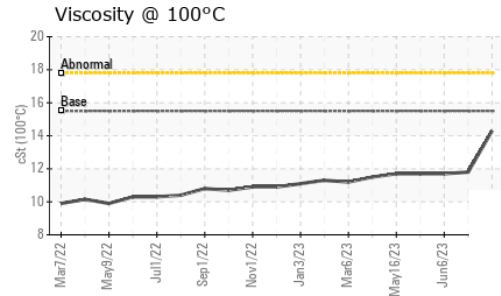
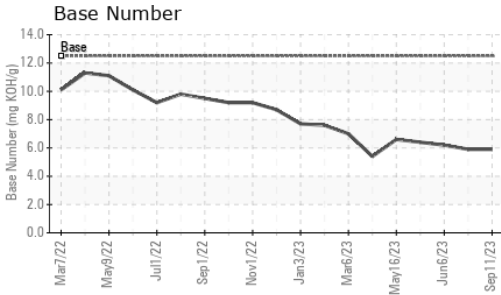
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.9	0.9	0.9
Nitration	Abs/cm	*ASTM D7624 >20	11.9	12.2	11.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.9	26.1	26.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	24.4	24.8	25.3
Base Number (BN)	mg KOH/g	ASTM D2896 12.5	5.9	5.9	6.2



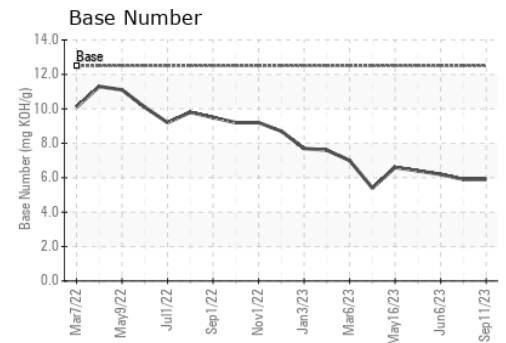
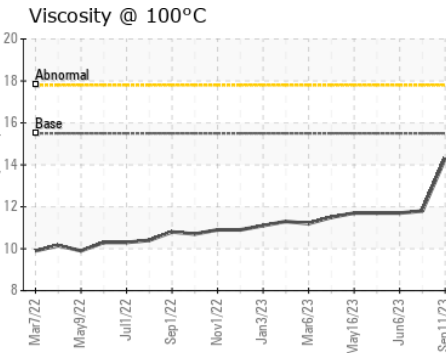
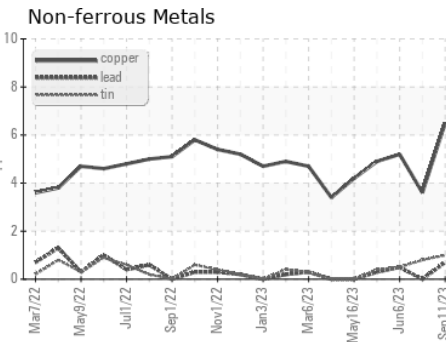
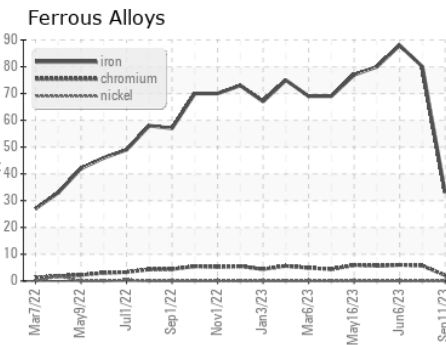
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.5	14.3	▲ 11.8	11.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0857180 Received : 28 Sep 2023
 Lab Number : 05964081 Diagnosed : 01 Oct 2023
 Unique Number : 10670632 Diagnostician : Don Baldrige
 Test Package : FLEET

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)

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