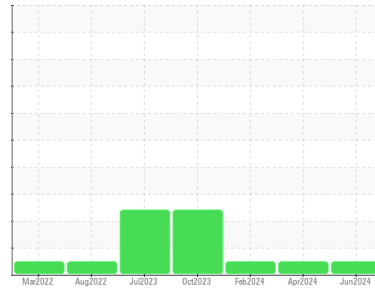




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

1757

Component

Diesel Engine

Fluid

DISEL ENGINE OIL SAE 5W30 (--- GAL)

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			WC0887571	HRE0000092	WC0887579
Sample Date	Client Info			17 Jun 2024	14 Apr 2024	26 Feb 2024
Machine Age	mls	Client Info		0	91048	89546
Oil Age	mls	Client Info		6000	6000	6000
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	14	4	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	2
Nickel	ppm	ASTM D5185m	>4	0	<1	1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	4
Lead	ppm	ASTM D5185m	>40	0	<1	2
Copper	ppm	ASTM D5185m	>330	<1	3	1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	9	76	60
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	172	204	153
Manganese	ppm	ASTM D5185m		19	1	2
Magnesium	ppm	ASTM D5185m	450	746	624	699
Calcium	ppm	ASTM D5185m	3000	1492	1293	1252
Phosphorus	ppm	ASTM D5185m	1150	753	656	731
Zinc	ppm	ASTM D5185m	1350	950	754	892
Sulfur	ppm	ASTM D5185m	4250	3134	3019	3158

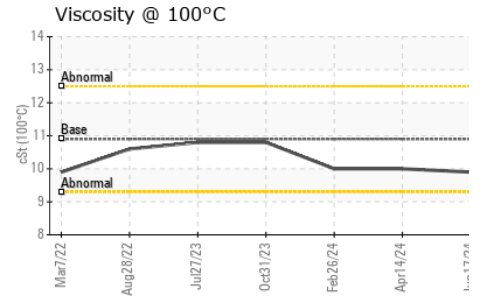
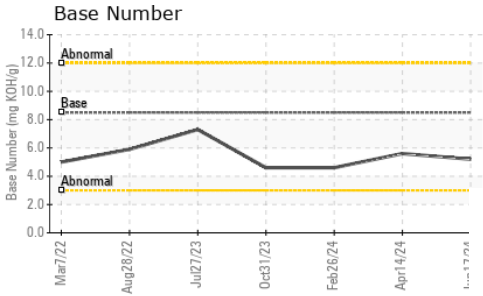
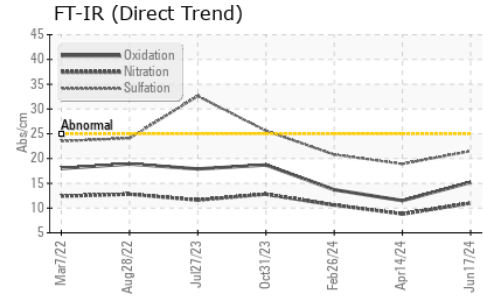
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	15	15	16
Sodium	ppm	ASTM D5185m		1	<1	3
Potassium	ppm	ASTM D5185m	>20	<1	2	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.0	8.8	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	18.9	20.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	11.5	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.2	5.6	4.6



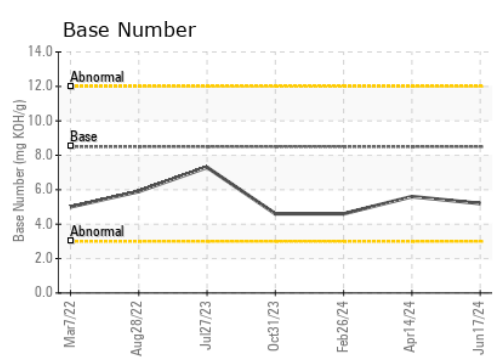
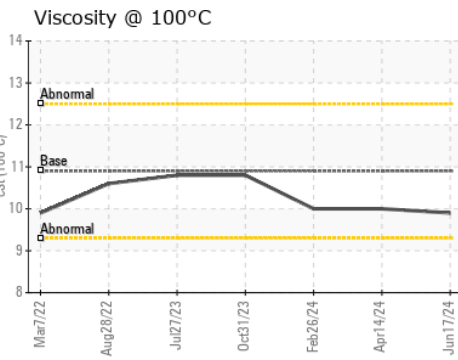
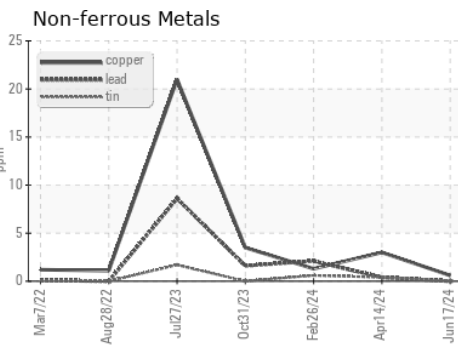
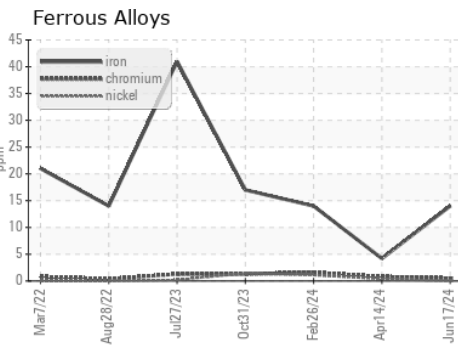
OIL ANALYSIS REPORT



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	10.9	9.9	10.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0887571 **Received** : 18 Jun 2024
Lab Number : **06213235** **Tested** : 19 Jun 2024
Unique Number : 11086099 **Diagnosed** : 20 Jun 2024 - Don Baldrige
Test Package : FLEET

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 US 27516
 Contact: Lisa DePasqua
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 T: (919)696-4941
 F:

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)