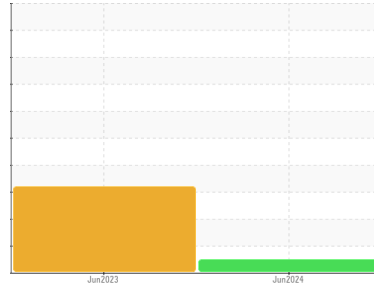




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

M1

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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0887543	WC0827058	---
Sample Date	Client Info			04 Jun 2024	28 Jun 2023	---
Machine Age	mls	Client Info		0	82260	---
Oil Age	mls	Client Info		0	6000	---
Oil Changed	Client Info			N/A	Changed	---
Sample Status				NORMAL	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	▲ 2.8	---	---
Water	WC Method	>0.2	NEG	NEG	---	---
Glycol	WC Method		NEG	NEG	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	31	▲ 115	---
Chromium	ppm	ASTM D5185m	>20	<1	3	---
Nickel	ppm	ASTM D5185m	>4	0	1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	4	11	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	6	10	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	13	29	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	73	46	---
Manganese	ppm	ASTM D5185m		4	1	---
Magnesium	ppm	ASTM D5185m	450	332	554	---
Calcium	ppm	ASTM D5185m	3000	2011	1199	---
Phosphorus	ppm	ASTM D5185m	1150	984	661	---
Zinc	ppm	ASTM D5185m	1350	1133	804	---
Sulfur	ppm	ASTM D5185m	4250	4260	3218	---

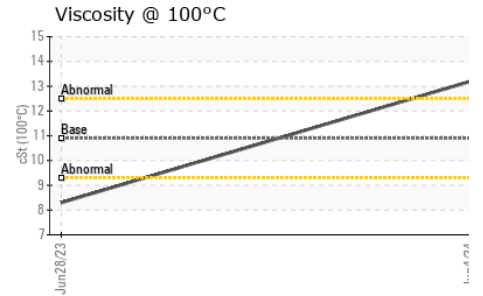
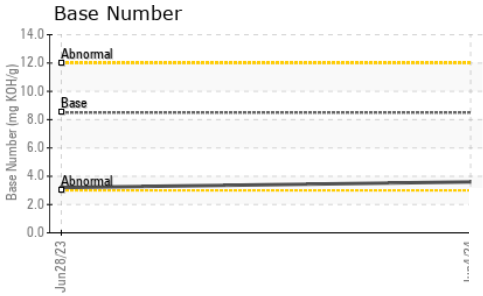
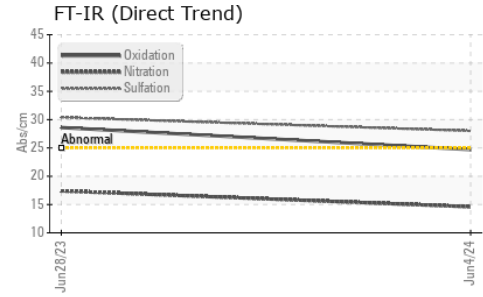
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	15	19	---
Sodium	ppm	ASTM D5185m		3	7	---
Potassium	ppm	ASTM D5185m	>20	<1	3	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	14.6	17.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.0	30.4	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.7	28.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	3.6	▲ 3.2	---



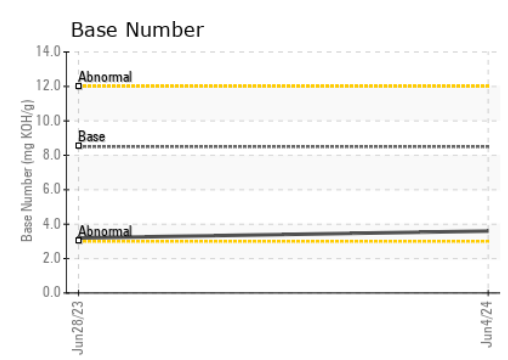
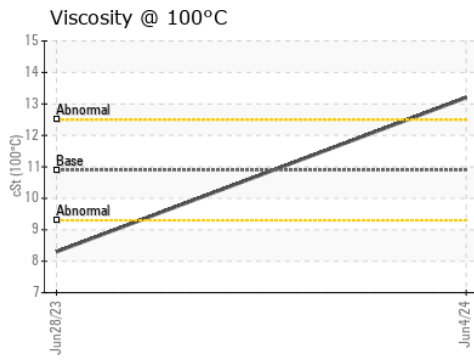
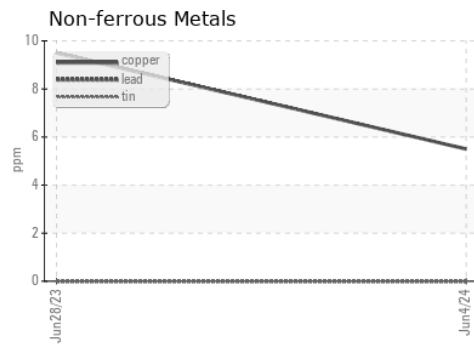
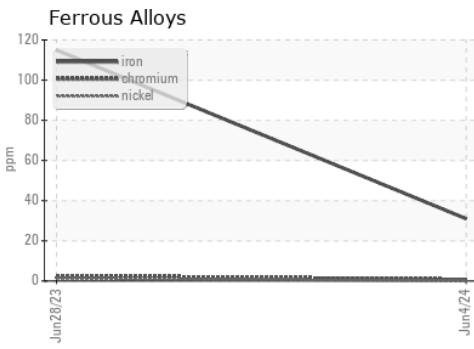
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	10.9	13.2	8.3	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0887543 **Received** : 18 Jun 2024
Lab Number : **06213240** **Tested** : 19 Jun 2024
Unique Number : 11086104 **Diagnosed** : 20 Jun 2024 - Don Baldrige
Test Package : FLEET

TOWN OF CHAPEL HILL
 6900 MILLHOUSE RD
 CHAPEL HILL, NC
 US 27516
 Contact: Lisa DePasqua
 ldepasqua@townofchapelhill.org
 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)