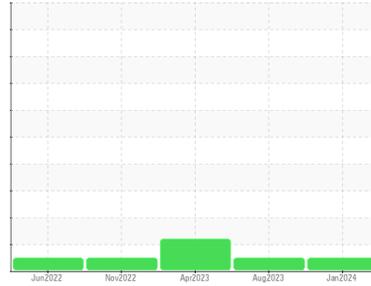




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**22206**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- 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		<b>WC0832059</b>	WC0832075	WC0784067
Sample Date	Client Info		<b>02 Jan 2024</b>	09 Aug 2023	20 Apr 2023
Machine Age	mls	Client Info	<b>296700</b>	242199	200912
Oil Age	mls	Client Info	<b>50000</b>	50000	50000
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>52</b>	37	57
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>6</b>	6	8
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>3</b>	3	5
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>5</b>	6	6
Barium	ppm	ASTM D5185m 10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 100	<b>70</b>	65	70
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m 450	<b>1010</b>	973	1033
Calcium	ppm	ASTM D5185m 3000	<b>1240</b>	1297	1434
Phosphorus	ppm	ASTM D5185m 1150	<b>1153</b>	1067	1107
Zinc	ppm	ASTM D5185m 1350	<b>1399</b>	1300	1420
Sulfur	ppm	ASTM D5185m 4250	<b>2815</b>	3305	3282

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>17</b>	14	16
Sodium	ppm	ASTM D5185m	<b>2</b>	4	5
Potassium	ppm	ASTM D5185m >20	<b>6</b>	6	17

## INFRA-RED

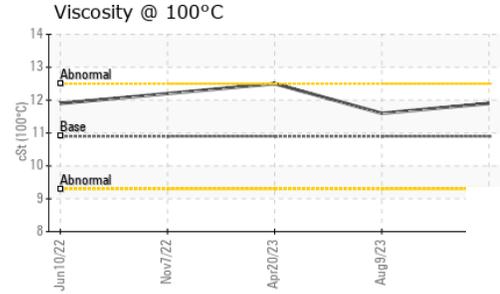
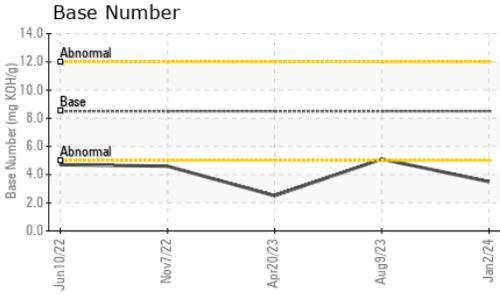
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.7</b>	0.5	0.7
Nitration	Abs/cm	*ASTM D7624 >20	<b>16.2</b>	14.1	15.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>29.6</b>	25.0	28.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>32.5</b>	24.8	31.9
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>3.5</b>	5.1	▲ 2.5



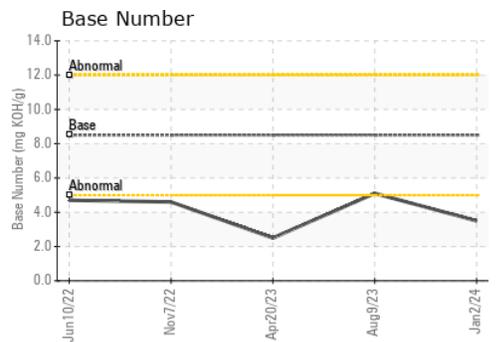
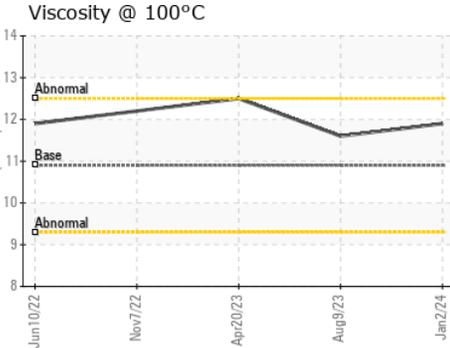
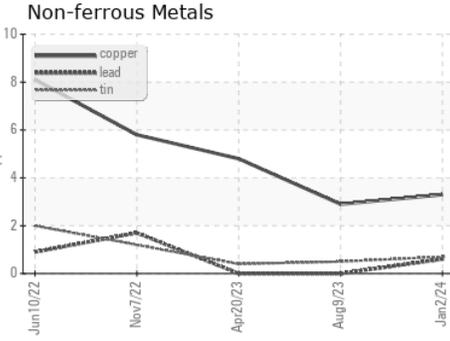
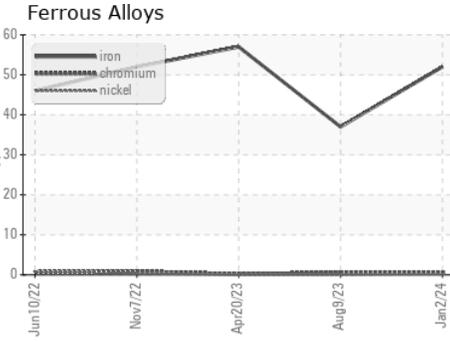
# OIL ANALYSIS REPORT



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	<b>11.9</b>	11.6	12.5

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0832059 **Received** : 18 Jan 2024  
**Lab Number** : **06064906** **Diagnosed** : 22 Jan 2024  
**Unique Number** : 10836288 **Diagnostician** : Angela Borella  
**Test Package** : FLEET

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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)