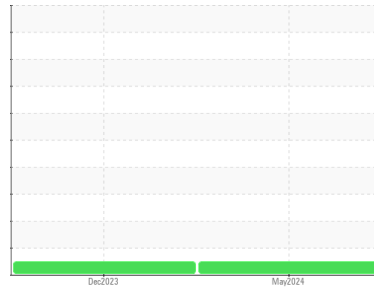




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**ME-75 CATERPILLAR 980H JMS06112**  
 Component  
**Diesel Engine**  
 Fluid  
**SHELL RIMULA SUPER SAE 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected 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>WC0908948</b>	WC0864723	---
Sample Date	Client Info			<b>30 May 2024</b>	13 Dec 2023	---
Machine Age	hrs	Client Info		<b>27744</b>	27458	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>9</b>	10	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	---
Lead	ppm	ASTM D5185m	>40	<b>2</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>1</b>	4	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	5	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>64</b>	61	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>662</b>	906	---
Calcium	ppm	ASTM D5185m	2840	<b>1754</b>	1119	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1186</b>	972	---
Zinc	ppm	ASTM D5185m	1270	<b>1460</b>	1210	---
Sulfur	ppm	ASTM D5185m	2829	<b>4392</b>	3237	---

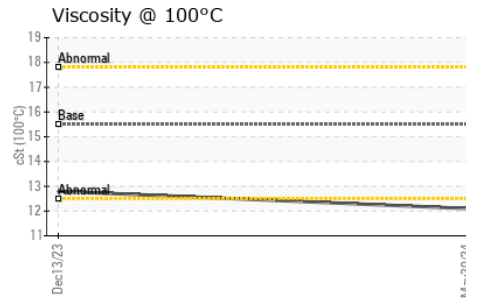
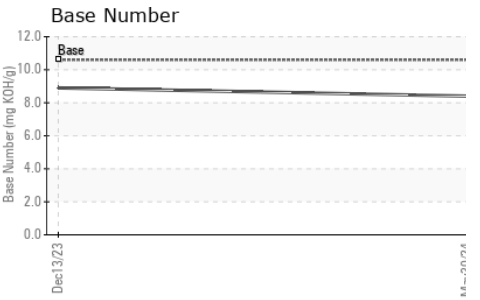
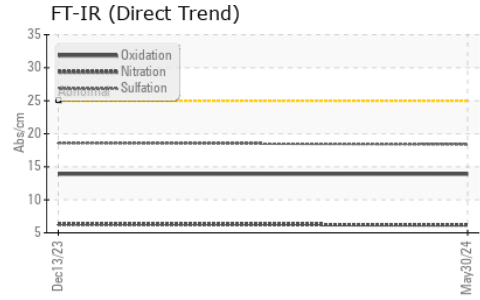
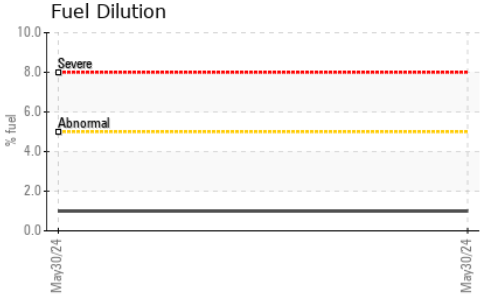
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	---
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	---
Fuel	%	ASTM D3524	>5	<b>1.0</b>	<1.0	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	6.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.4</b>	18.6	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.9</b>	13.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.6	<b>8.4</b>	8.9	---



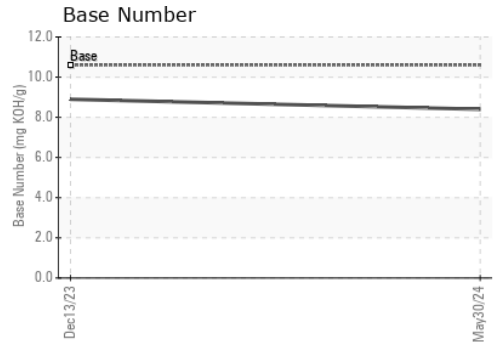
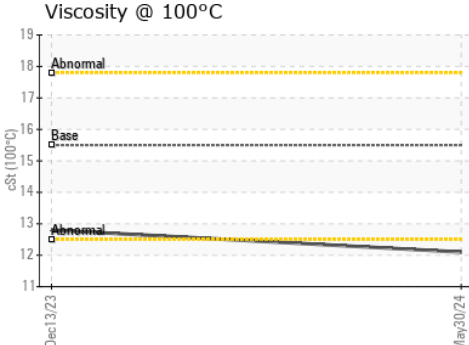
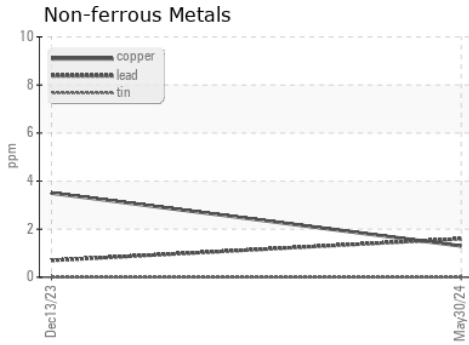
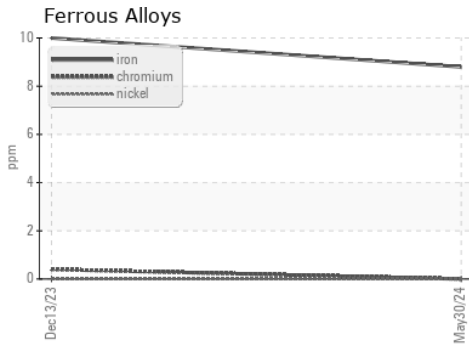
# OIL ANALYSIS REPORT



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	15.5	12.1	12.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0908948      **Received** : 07 Jun 2024  
**Lab Number** : 06203973      **Tested** : 12 Jun 2024  
**Unique Number** : 11071434      **Diagnosed** : 12 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**COVIA - GUION - 025**

421 MAIN STREET  
GUION, AR  
US 72540

Contact: DANIEL DELGADO  
daniel.delgado@coviacorp.com

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)

T:  
F: