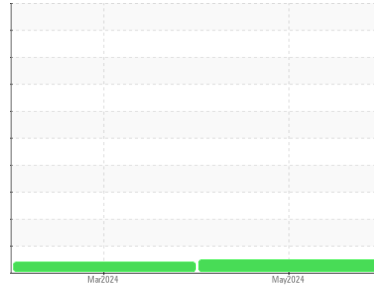




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**MCI 1914**

Component  
**Diesel Engine**

Fluid  
**PURUS SYNTHETIC BLEND 10W30 (--- 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			<b>WC0859095</b>	WC0859063	---
Sample Date	Client Info			<b>28 May 2024</b>	05 Mar 2024	---
Machine Age	mls	Client Info		<b>623155</b>	601685	---
Oil Age	mls	Client Info		<b>22000</b>	23000	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ATTENTION	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	---
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>7</b>	33	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	2	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	5	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	17	---
Copper	ppm	ASTM D5185m	>330	<b>0</b>	2	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>7</b>	20	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>63</b>	65	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>1049</b>	931	---
Calcium	ppm	ASTM D5185m		<b>1144</b>	1339	---
Phosphorus	ppm	ASTM D5185m		<b>1141</b>	938	---
Zinc	ppm	ASTM D5185m		<b>1372</b>	1156	---
Sulfur	ppm	ASTM D5185m		<b>4079</b>	3156	---

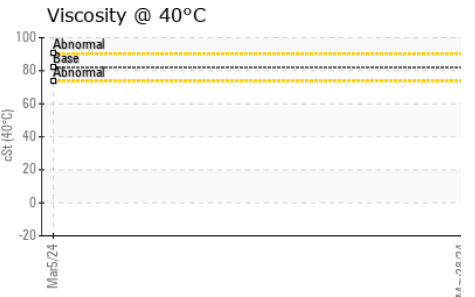
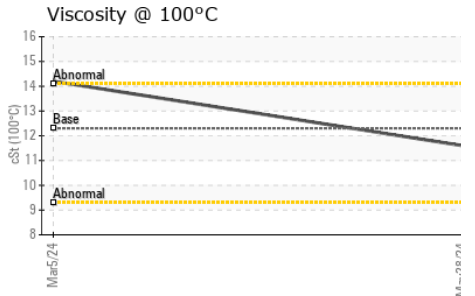
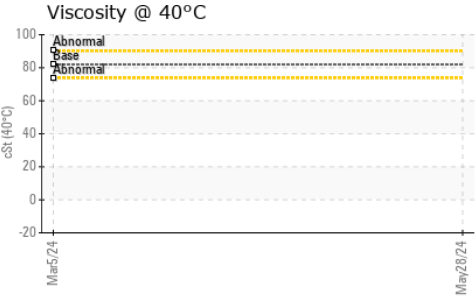
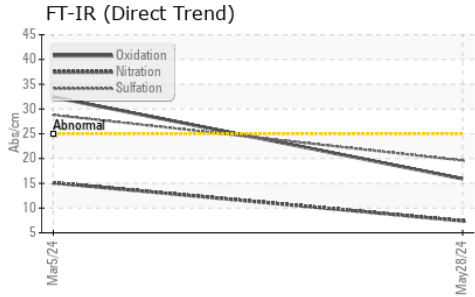
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>8</b>	11	---
Sodium	ppm	ASTM D5185m		<b>2</b>	26	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	22	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.4</b>	15.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.6</b>	28.8	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	32.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.1</b>	5.5	---



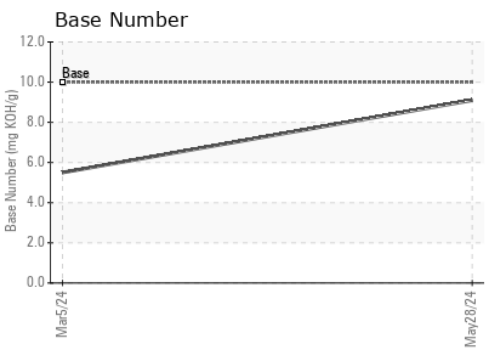
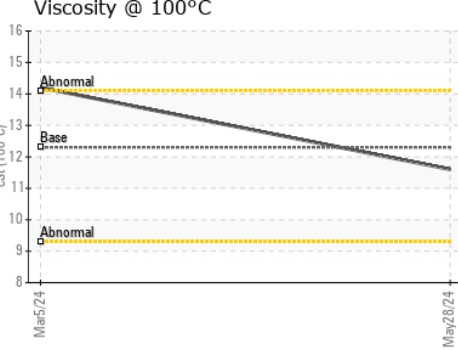
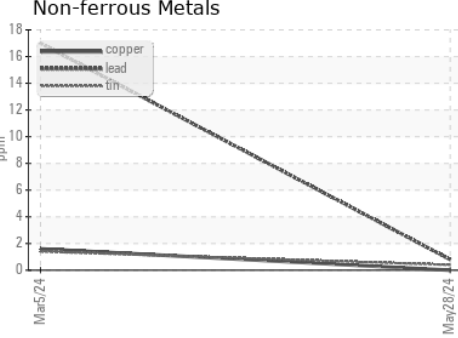
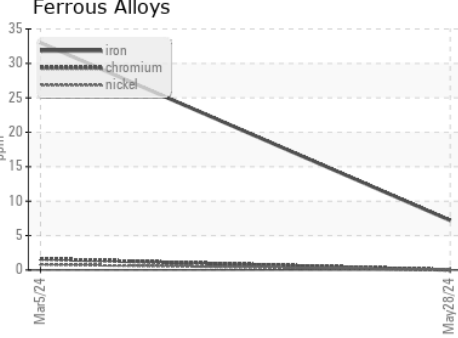
# OIL ANALYSIS REPORT



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	12.3	11.6	14.2

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0859095      **Received** : 12 Jun 2024  
**Lab Number** : 06208302      **Tested** : 14 Jun 2024  
**Unique Number** : 11075763      **Diagnosed** : 14 Jun 2024 - Don Baldrige  
**Test Package** : FLEET ( Additional Tests: KV40 )

**JEFFERSON LINES**  
 1830 4TH AVE N  
 BILLINGS, MT  
 US 59101  
 Contact: BILLINGS SHOP  
 billingsshop@jeffersonlines.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)