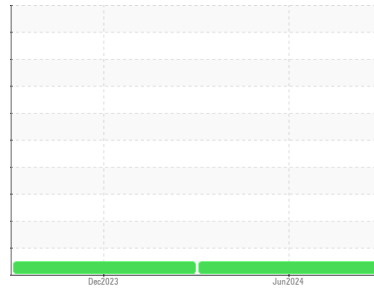


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**MCI 81**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

#### 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>PCA0127423</b>	PCA0082995	---
Sample Date	Client Info			<b>17 Jun 2024</b>	03 Dec 2023	---
Machine Age	mls	Client Info		<b>0</b>	0	---
Oil Age	mls	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

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>36</b>	33	---
Chromium	ppm	ASTM D5185m	>20	<b>6</b>	6	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>10</b>	7	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>12</b>	18	---
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

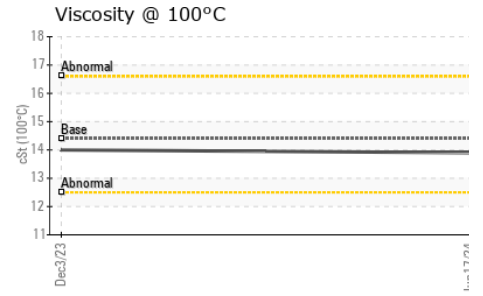
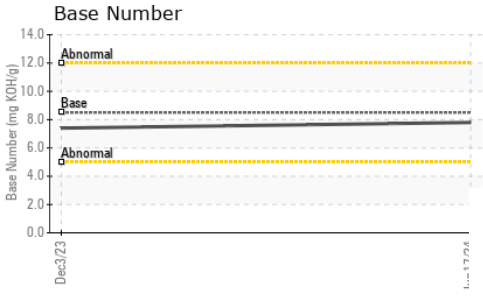
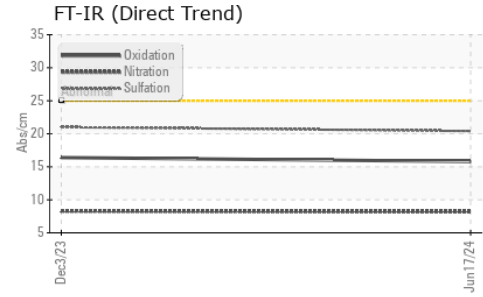
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>5</b>	2	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m	100	<b>62</b>	66	---
Manganese	ppm	ASTM D5185m		<b>2</b>	1	---
Magnesium	ppm	ASTM D5185m	450	<b>968</b>	896	---
Calcium	ppm	ASTM D5185m	3000	<b>1147</b>	1117	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1055</b>	890	---
Zinc	ppm	ASTM D5185m	1350	<b>1293</b>	1189	---
Sulfur	ppm	ASTM D5185m	4250	<b>3194</b>	3214	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>23</b>	23	---
Sodium	ppm	ASTM D5185m	>216	<b>12</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	8.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.4</b>	21.0	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.8</b>	16.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.8</b>	7.4	---

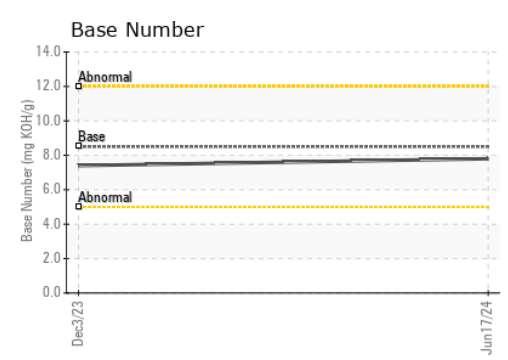
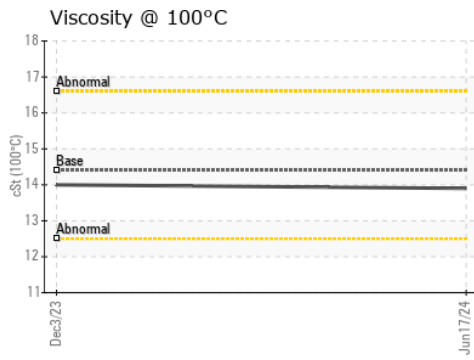
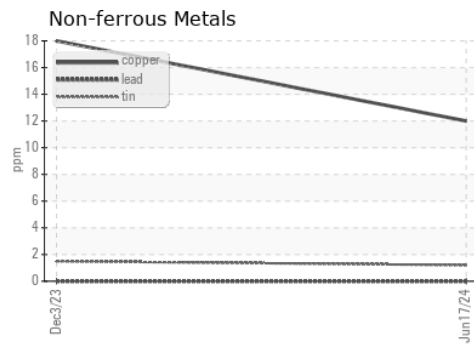
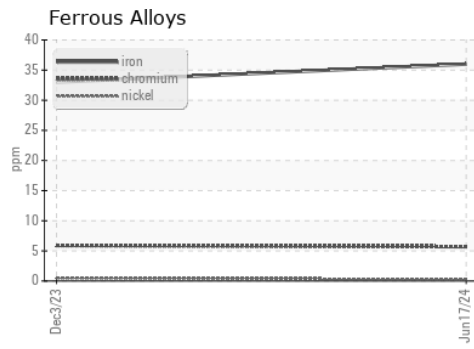
# OIL ANALYSIS REPORT



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	14.4	<b>13.9</b>	14.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0127423      **Received** : 17 Jun 2024  
**Lab Number** : **06212896**      **Tested** : 19 Jun 2024  
**Unique Number** : 11085760      **Diagnosed** : 19 Jun 2024 - Wes Davis  
**Test Package** : FLEET

**NORTHFIELD LINES**  
 1034 GEMINI RD  
 EAGAN, MN  
 US 55121  
 Contact: Tyler Smith  
 TSmith@northfieldlines.com  
 T: (651)203-8888  
 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)