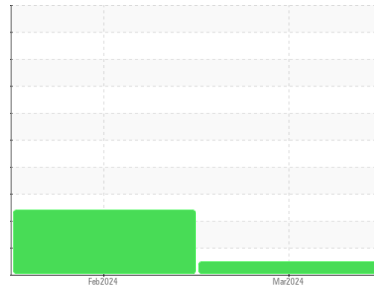


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**

 Machine Id  
**223168 []**

 Component  
**Diesel Engine**

 Fluid  
 **DIESEL ENGINE OIL SAE 10W30 (--- QTS)**
**DIAGNOSIS**
**Recommendation**

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

**Wear**

Metal levels are typical for a new component breaking in.

**Contamination**

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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>PCA0098810</b>	PCA0101230	---
Sample Date	Client Info		<b>21 Mar 2024</b>	01 Feb 2024	---
Machine Age	mls	Client Info	<b>63888</b>	33411	---
Oil Age	mls	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	ABNORMAL	---

**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>25</b>	43	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>20	<b>17</b>	37	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>108</b>	300	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	5	---
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	250	<b>17</b>	110	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	1	---
Molybdenum	ppm	ASTM D5185m	100	<b>75</b>	126	---
Manganese	ppm	ASTM D5185m		<b>2</b>	4	---
Magnesium	ppm	ASTM D5185m	450	<b>904</b>	680	---
Calcium	ppm	ASTM D5185m	3000	<b>1219</b>	1346	---
Phosphorus	ppm	ASTM D5185m	1150	<b>882</b>	724	---
Zinc	ppm	ASTM D5185m	1350	<b>1164</b>	836	---
Sulfur	ppm	ASTM D5185m	4250	<b>2562</b>	2157	---

**CONTAMINANTS**

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>17</b>	76	---
Sodium	ppm	ASTM D5185m		<b>1</b>	3	---
Potassium	ppm	ASTM D5185m	>20	<b>36</b>	91	---

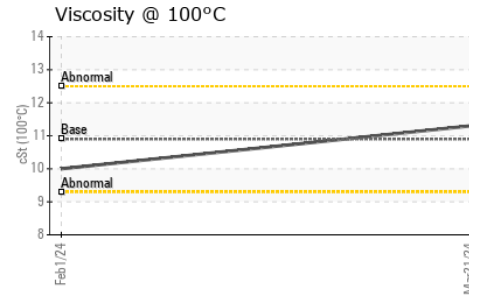
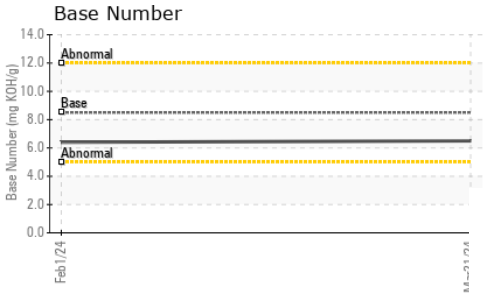
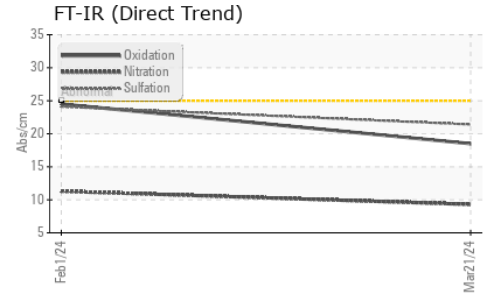
**INFRA-RED**

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.3</b>	11.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.4</b>	24.1	---

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.5</b>	24.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.5</b>	6.4	---

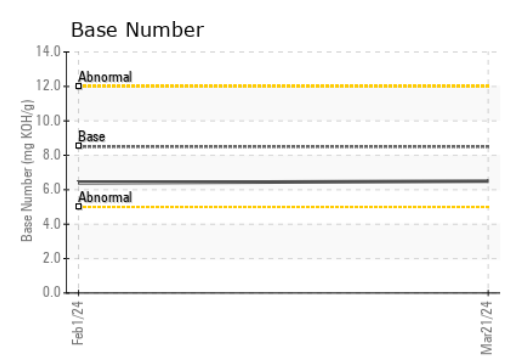
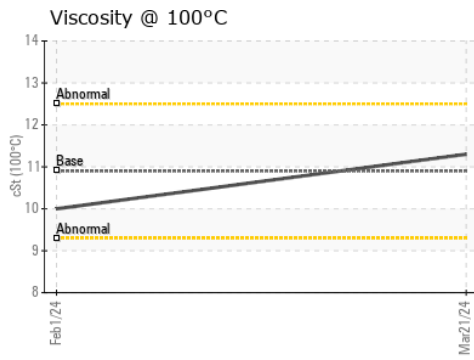
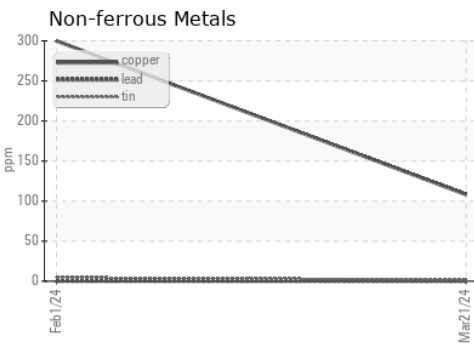
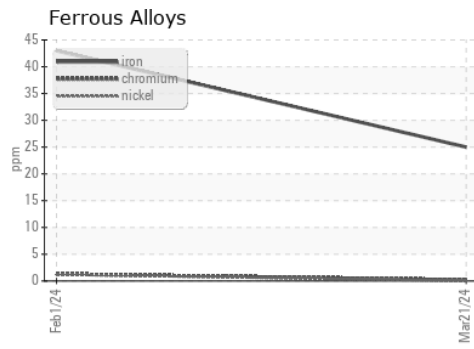
# OIL ANALYSIS REPORT



PARAMETER	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	11.3	10.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0098810      **Received** : 24 Apr 2024  
**Lab Number** : **06158826**      **Tested** : 25 Apr 2024  
**Unique Number** : 10994249      **Diagnosed** : 25 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**McLane Company - High Plains - 600HP**  
 1717 East Loop 289  
 LUBBOCK, TX  
 US 79403  
 Contact: RITA GARCIA  
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 T: (806)766-2902  
 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)