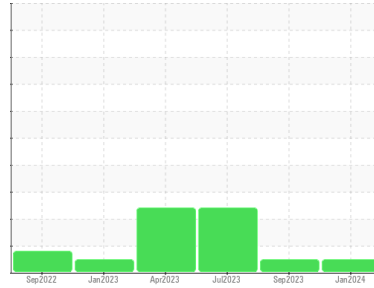


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**222055 []**

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

All component wear rates are normal.

### 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>PCA0101198</b>	PCA0101278	PCA0073122
Sample Date	Client Info	<b>15 Jan 2024</b>	15 Sep 2023	11 Jul 2023
Machine Age	mls	<b>217299</b>	187489	156426
Oil Age	mls	<b>0</b>	30000	30000
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>12</b>	8	18
Chromium	ppm ASTM D5185m >20	<b>1</b>	<1	2
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm ASTM D5185m >20	<b>7</b>	6	13
Lead	ppm ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm ASTM D5185m >330	<b>8</b>	15	34
Tin	ppm ASTM D5185m >15	<b>0</b>	<1	0
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>9</b>	<1	<1
Barium	ppm ASTM D5185m 10	<b>0</b>	<1	0
Molybdenum	ppm ASTM D5185m 100	<b>61</b>	61	67
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 450	<b>940</b>	956	1061
Calcium	ppm ASTM D5185m 3000	<b>1041</b>	1044	1197
Phosphorus	ppm ASTM D5185m 1150	<b>1005</b>	976	967
Zinc	ppm ASTM D5185m 1350	<b>1226</b>	1189	1339
Sulfur	ppm ASTM D5185m 4250	<b>2741</b>	2634	3069

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	2	3
Sodium	ppm ASTM D5185m	<b>4</b>	15	▲ 78
Potassium	ppm ASTM D5185m >20	<b>15</b>	25	▲ 109

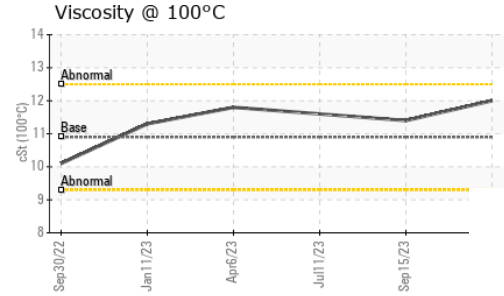
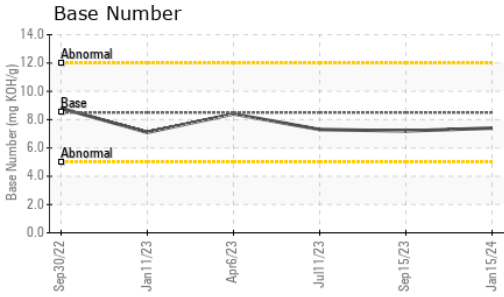
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.5</b>	0.4	0.6
Nitration	Abs/cm *ASTM D7624 >20	<b>8.4</b>	7.8	9.3
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.6</b>	18.8	20.7

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>15.9</b>	15.1	17.0
Base Number (BN)	mg KOH/g ASTM D2896 8.5	<b>7.4</b>	7.2	7.3

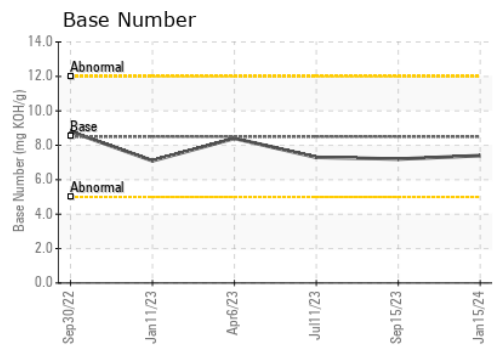
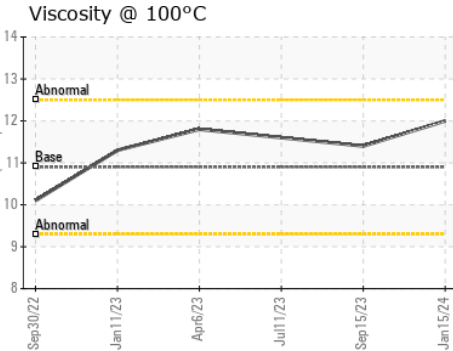
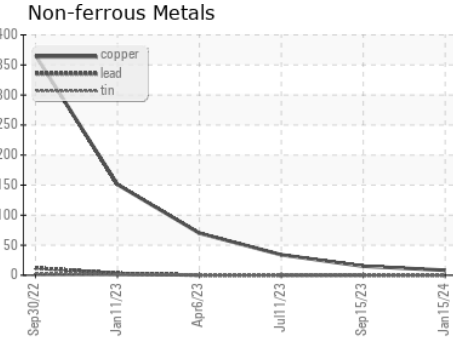
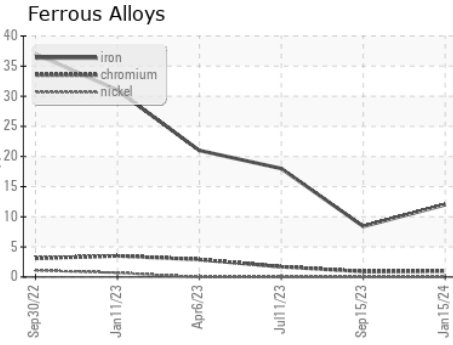
# OIL ANALYSIS REPORT



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>12.0</b>	11.4	11.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0101198 **Received** : 16 Jan 2024  
**Lab Number** : **06060613** **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10831995 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**McLane Company - High Plains - 600HP**  
 1717 East Loop 289  
 LUBBOCK, TX  
 US 79403  
 Contact: RITA GARCIA  
 rita.garcia@mcclaneco.com  
 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)