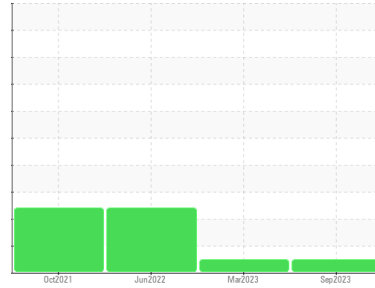


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**602 (S/N 1npcl7ex4ld629513)**

Component  
**1 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. Please specify the component make and model with 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>PCA0082814</b>	PCA0069579	PCA0058395
Sample Date	Client Info		<b>26 Sep 2023</b>	29 Mar 2023	27 Jun 2022
Machine Age	hrs	Client Info	<b>0</b>	2808	0
Oil Age	hrs	Client Info	<b>0</b>	620	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	N/A
Sample Status			<b>NORMAL</b>	NORMAL	ATTENTION

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>11</b>	16	42
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	4
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>6</b>	13	▲ 14
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	1	2
Copper	ppm	ASTM D5185m >330	<b>4</b>	4	22
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
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>2</b>	3	6
Barium	ppm	ASTM D5185m 10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 100	<b>65</b>	63	53
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185m 450	<b>928</b>	987	800
Calcium	ppm	ASTM D5185m 3000	<b>1112</b>	1170	1365
Phosphorus	ppm	ASTM D5185m 1150	<b>1076</b>	1032	959
Zinc	ppm	ASTM D5185m 1350	<b>1236</b>	1261	1190
Sulfur	ppm	ASTM D5185m 4250	<b>3543</b>	3370	3170

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	9	▲ 31
Sodium	ppm	ASTM D5185m >216	<b>0</b>	2	4
Potassium	ppm	ASTM D5185m >20	<b>16</b>	31	38

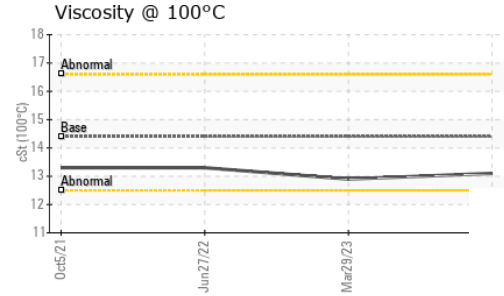
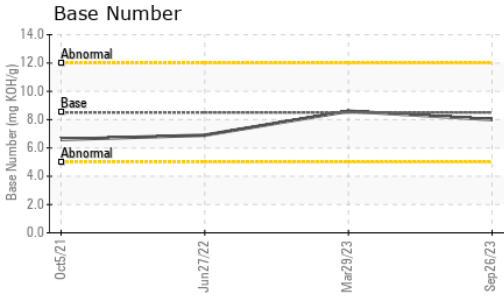
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	8.0	11.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.9</b>	20.1	24.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.3</b>	16.7	21.1
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>8.0</b>	8.6	6.9

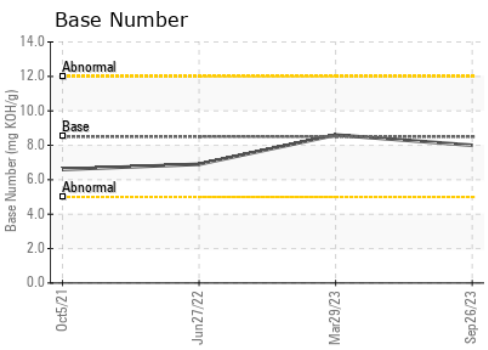
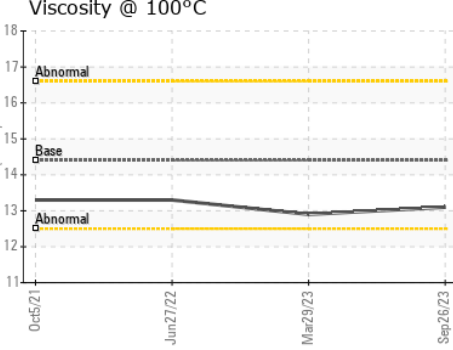
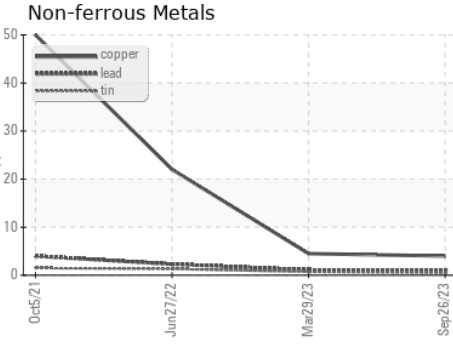
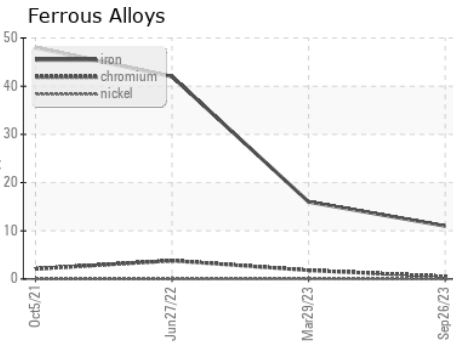
# OIL ANALYSIS REPORT



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	14.4	<b>13.1</b>	12.9	13.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0082814 **Received** : 23 Oct 2023  
**Lab Number** : **05986215** **Diagnosed** : 24 Oct 2023  
**Unique Number** : 10708877 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**AVR - APPLE VALLEY READY MIX**  
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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)