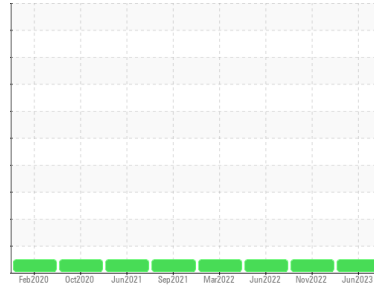


Machine Id  
**583**  
 Component  
**Diesel Engine**  
 Fluid  
 **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**



**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>PCA0069608</b>	PCA0069257	PCA0058329
Sample Date	Client Info			<b>15 Jun 2023</b>	04 Nov 2022	27 Jun 2022
Machine Age	hrs Client Info			<b>5833</b>	2463	2463
Oil Age	hrs Client Info			<b>274</b>	2463	2463
Oil Changed	Client Info			<b>Not Chngd</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

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>17</b>	12	12
Chromium	ppm ASTM D5185m	>20		<b>1</b>	1	<1
Nickel	ppm ASTM D5185m	>4		<b>0</b>	<1	0
Titanium	ppm ASTM D5185m			<b>0</b>	0	0
Silver	ppm ASTM D5185m	>3		<b>0</b>	0	0
Aluminum	ppm ASTM D5185m	>20		<b>7</b>	5	3
Lead	ppm ASTM D5185m	>40		<b>0</b>	2	<1
Copper	ppm ASTM D5185m	>330		<b>1</b>	2	1
Tin	ppm ASTM D5185m	>15		<b>&lt;1</b>	<1	<1
Vanadium	ppm ASTM D5185m			<b>0</b>	0	0
Cadmium	ppm ASTM D5185m			<b>0</b>	0	0

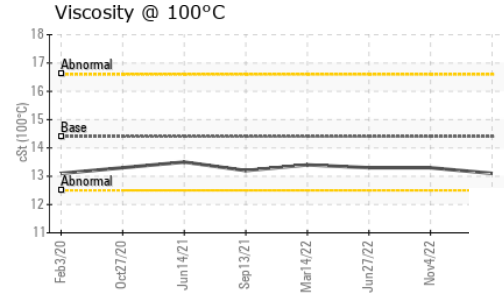
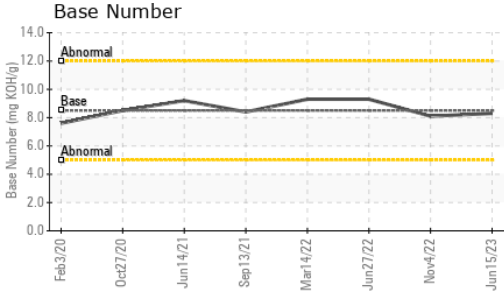
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	250		<b>3</b>	5	5
Barium	ppm ASTM D5185m	10		<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	100		<b>67</b>	62	60
Manganese	ppm ASTM D5185m			<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m	450		<b>1085</b>	1030	898
Calcium	ppm ASTM D5185m	3000		<b>1198</b>	1248	1071
Phosphorus	ppm ASTM D5185m	1150		<b>1148</b>	1032	985
Zinc	ppm ASTM D5185m	1350		<b>1405</b>	1404	1177
Sulfur	ppm ASTM D5185m	4250		<b>3967</b>	3788	3482

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25		<b>6</b>	7	4
Sodium	ppm ASTM D5185m	>158		<b>2</b>	1	2
Potassium	ppm ASTM D5185m	>20		<b>12</b>	9	4

INFRA-RED		method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3		<b>0.3</b>	0.4	0.4
Nitration	Abs/cm *ASTM D7624	>20		<b>8.0</b>	8.4	8.6
Sulfation	Abs/.1mm *ASTM D7415	>30		<b>19.8</b>	20.3	21.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25		<b>16.1</b>	16.6	17.2
Base Number (BN)	mg KOH/g ASTM D2896	8.5		<b>8.3</b>	8.1	9.3

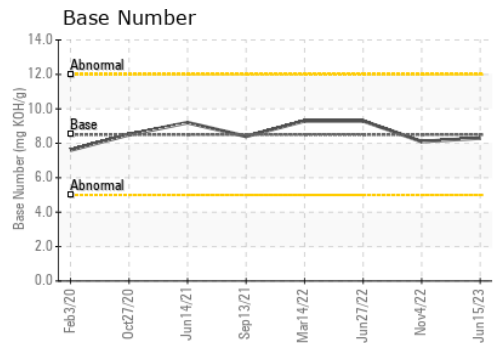
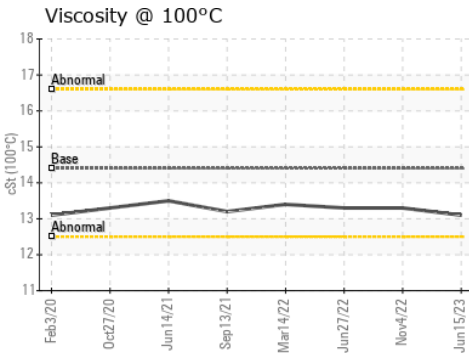
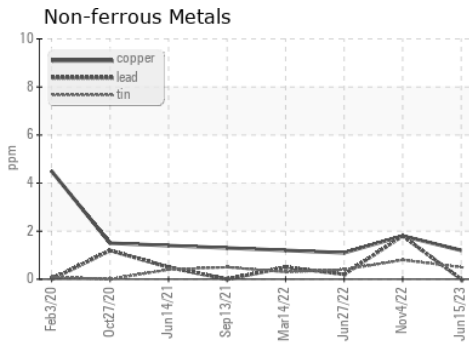
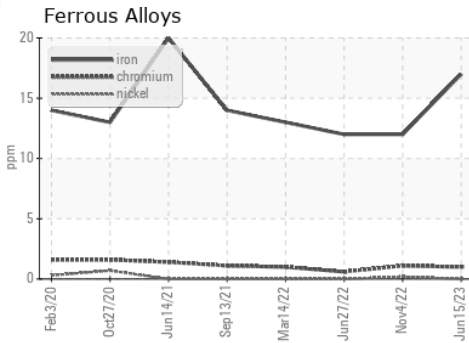
# OIL ANALYSIS REPORT



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	14.4	<b>13.1</b>	13.3	13.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0069608 **Received** : 25 Aug 2023  
**Lab Number** : **05934696** **Diagnosed** : 25 Aug 2023  
**Unique Number** : 10619967 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**AVR - APPLE VALLEY READY MIX**  
 14698 GALAXY AVE  
 APPLE VALLEY, MN  
 US 55124  
 Contact: senia zimmer  
 avrconcrete.senia@gmail.com  
 T: (952)953-2992  
 F: (952)953-2994

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)