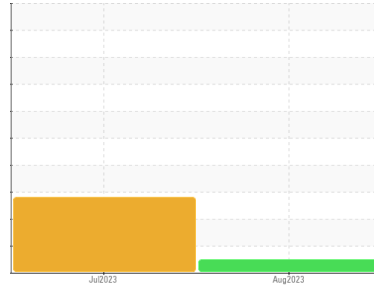




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

3201

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

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			WC0758976	WC0758995	---
Sample Date	Client Info			18 Aug 2023	24 Jul 2023	---
Machine Age	hrs	Client Info		1088	903	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	▲ 3.8	---
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	8	54	---
Chromium	ppm	ASTM D5185m	>20	<1	2	---
Nickel	ppm	ASTM D5185m	>4	1	8	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	<1	<1	---
Aluminum	ppm	ASTM D5185m	>20	1	6	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	26	183	---
Tin	ppm	ASTM D5185m	>15	<1	4	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	14	151	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	72	120	---
Manganese	ppm	ASTM D5185m		<1	4	---
Magnesium	ppm	ASTM D5185m	450	875	798	---
Calcium	ppm	ASTM D5185m	3000	1170	1503	---
Phosphorus	ppm	ASTM D5185m	1150	965	736	---
Zinc	ppm	ASTM D5185m	1350	1164	956	---
Sulfur	ppm	ASTM D5185m	4250	3160	3038	---

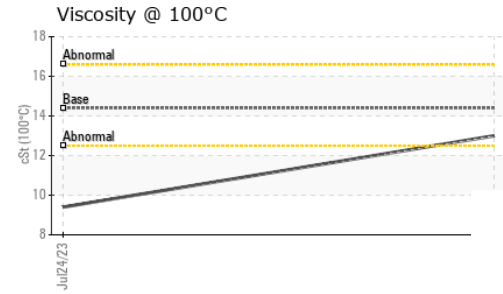
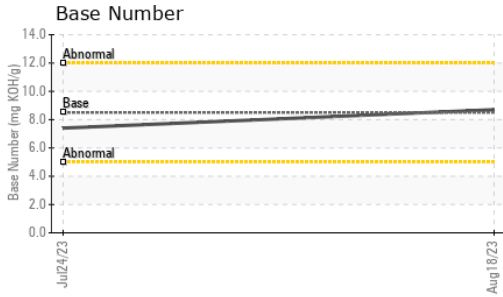
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	▲ 85	---
Sodium	ppm	ASTM D5185m	>158	0	11	---
Potassium	ppm	ASTM D5185m	>20	1	14	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	5.8	11.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	23.4	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	22.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.7	7.4	---



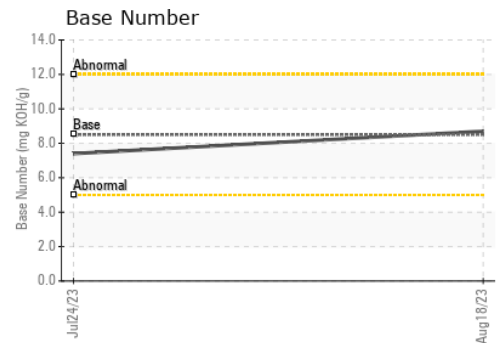
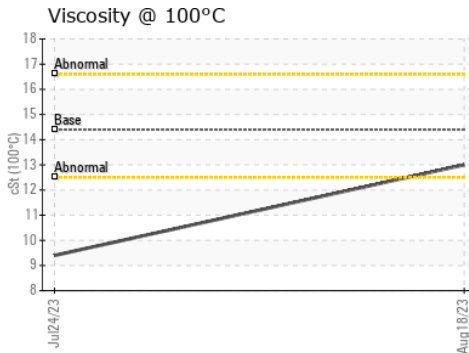
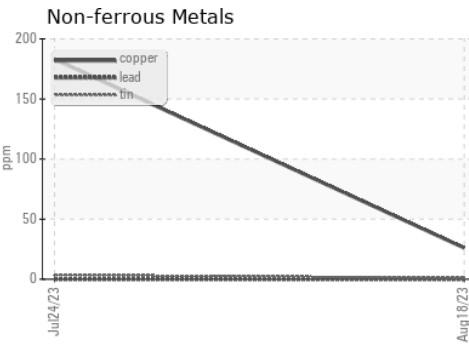
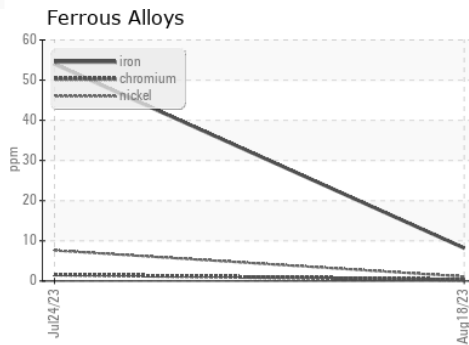
OIL ANALYSIS REPORT



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	13.0	▲ 9.4	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0758976 **Received** : 21 Aug 2023
Lab Number : **05929444** **Diagnosed** : 22 Aug 2023
Unique Number : 10609391 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

Apple Valley Waste - Baltimore District
 240 S KRESSON ST
 BALTIMORE, MD
 US 21224
 Contact: KEVIN HINSON
 khinson@goldmedal.net

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)

T:
F: