



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1638
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0847977	WC0760007	---
Sample Date		Client Info		02 Nov 2023	16 Mar 2023	---
Machine Age	hrs	Client Info		12856	11704	---
Oil Age	hrs	Client Info		1152	0	---
Filter Age	hrs	Client Info		1152	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	20	13	---
Chromium	ppm	ASTM D5185m	>4	1	1	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	4	0	---
Lead	ppm	ASTM D5185m	>45	3	<1	---
Copper	ppm	ASTM D5185m	>85	71	42	---
Tin	ppm	ASTM D5185m	>4	2	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

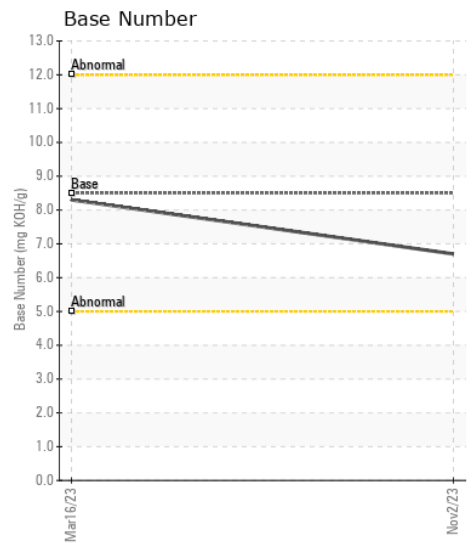
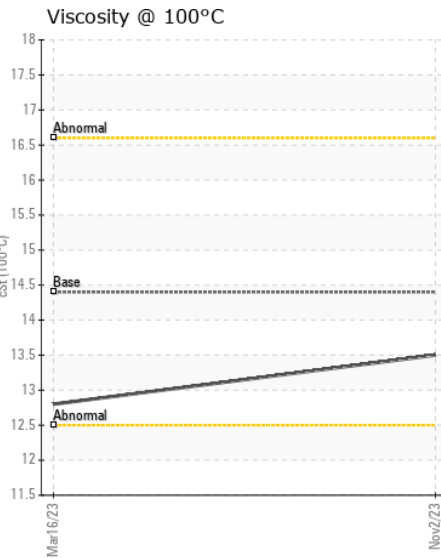
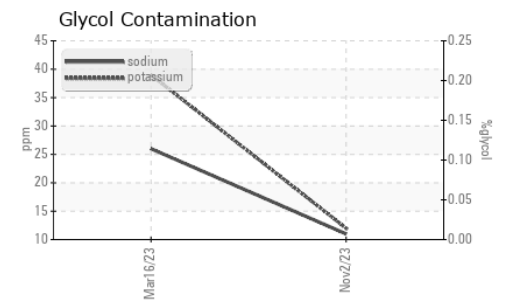
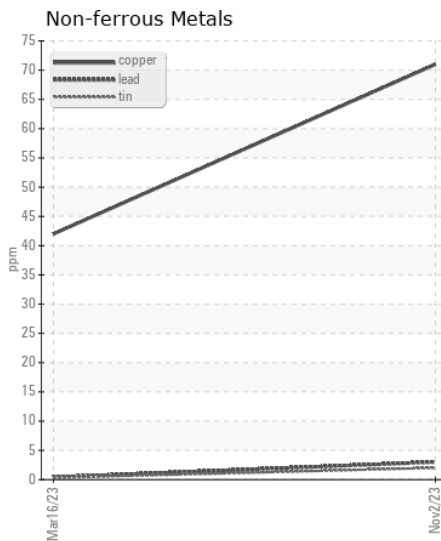
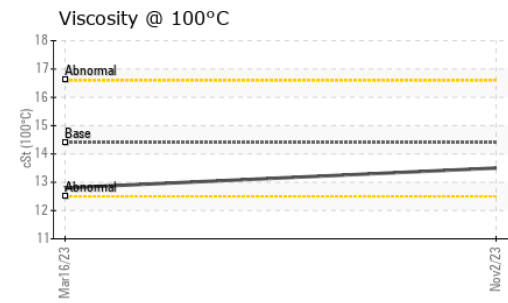
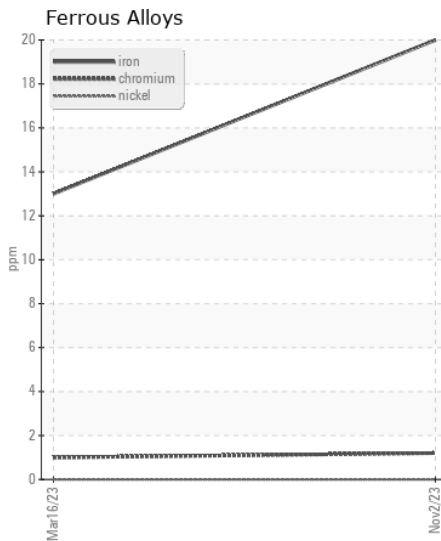
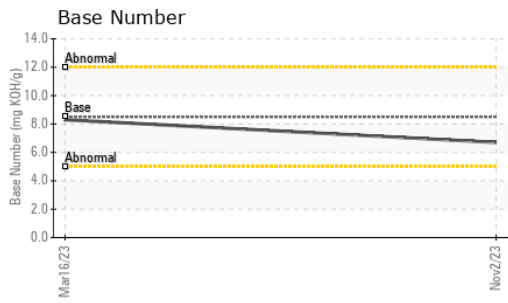
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	7	7	---
Potassium	ppm	ASTM D5185m	>20	12	▲ 39	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol	%	*ASTM D2982		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	11.4	9.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.8	21.2	---
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	---

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.

Sodium	ppm	ASTM D5185m	>158	11	26	---
Boron	ppm	ASTM D5185m	250	7	4	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	69	71	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	450	956	944	---
Calcium	ppm	ASTM D5185m	3000	1211	1257	---
Phosphorus	ppm	ASTM D5185m	1150	950	1062	---
Zinc	ppm	ASTM D5185m	1350	1282	1318	---
Sulfur	ppm	ASTM D5185m	4250	2429	3367	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	17.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.7	8.3	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.5	12.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0847977 **Received** : 16 Jan 2024
Lab Number : 06061849 **Diagnosed** : 17 Jan 2024
Unique Number : 10833231 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: Glycol, TBN)

Apple Valley Waste - Chambersburg Location
 5436 Sunset Pike
 Chambersburg, PA
 US 17202
 Contact: Service Manager

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: