



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id

8

Component

Gasoline Engine

Fluid

GASOLINE ENGINE OIL SAE 5W20 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0847979	WC0847920	WC0759987
Sample Date		Client Info		27 Oct 2023	04 Oct 2023	02 May 2023
Machine Age	mls	Client Info		210977	209140	198375
Oil Age	mls	Client Info		1837	5014	0
Filter Age	mls	Client Info		1837	5014	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	4	10	23
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	2	6	1
Lead	ppm	ASTM D5185m	>50	<1	0	0
Copper	ppm	ASTM D5185m	>155	4	5	5
Tin	ppm	ASTM D5185m	>10	2	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

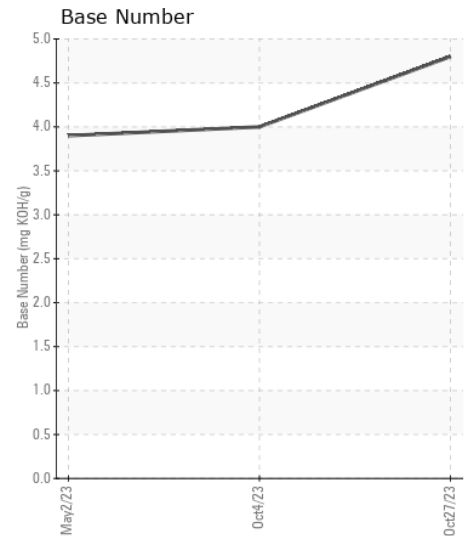
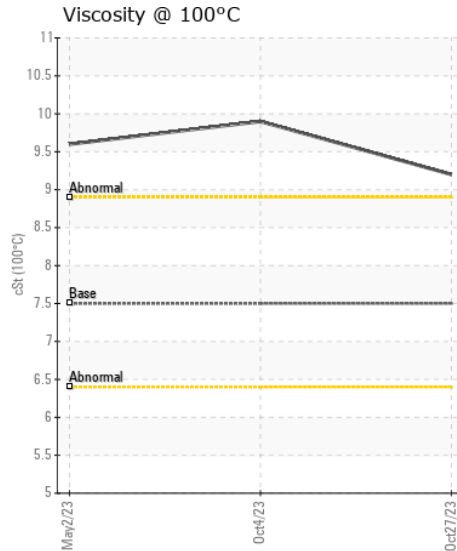
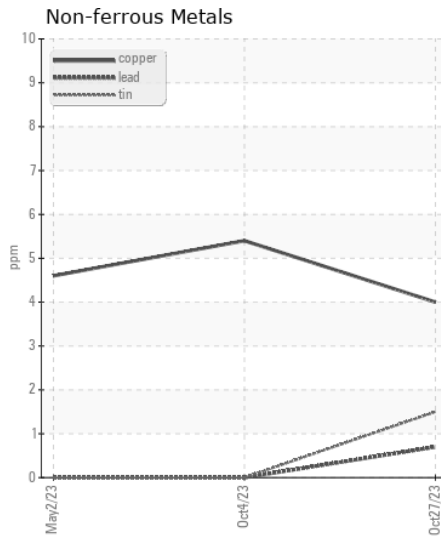
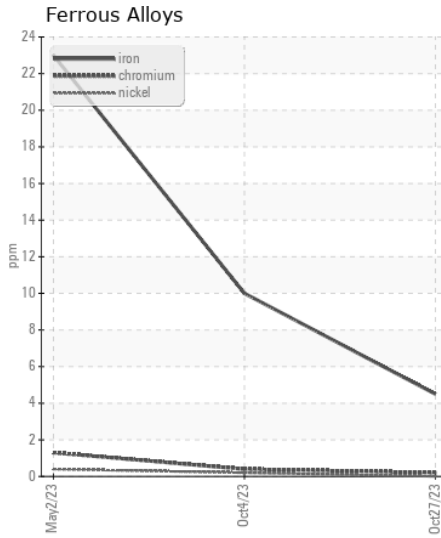
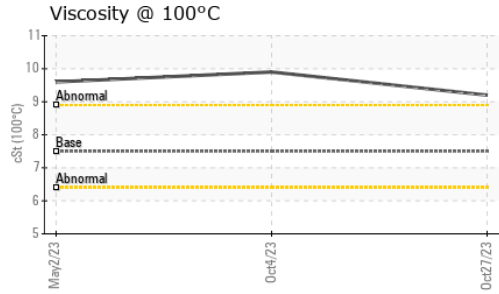
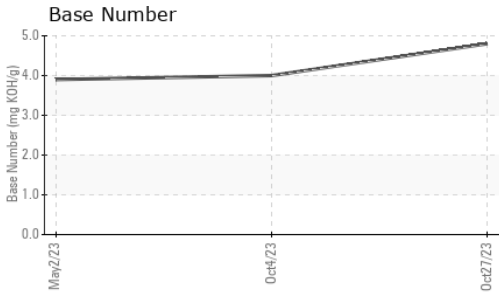
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	9	10	12
Potassium	ppm	ASTM D5185m	>20	<1	2	<1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	7.0	9.8	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.6	19.6	21.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	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	>50	2	1	3
Boron	ppm	ASTM D5185m	75	92	11	28
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	100	100	277	244
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	12	478	474	477
Calcium	ppm	ASTM D5185m	2100	902	1247	1202
Phosphorus	ppm	ASTM D5185m	650	565	558	627
Zinc	ppm	ASTM D5185m	850	689	762	776
Sulfur	ppm	ASTM D5185m	2500	2233	2124	1916
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.0	14.3	15.4
Base Number (BN)	mg KOH/g	ASTM D2896		4.8	4.0	3.9
Visc @ 100°C	cSt	ASTM D445	7.5	9.2	9.9	9.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0847979 **Received** : 16 Jan 2024
Lab Number : 06061850 **Diagnosed** : 17 Jan 2024
Unique Number : 10833232 **Diagnostician** : Don Baldridge
Test Package : CONST (Additional Tests: 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)

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