



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
GROVE 7702 (S/N 232574)
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		DC0021571	DC0023982	---
Sample Date		Client Info		01 Apr 2024	18 Oct 2022	---
Machine Age	hrs	Client Info		5230	4854	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	17	9	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	1	1	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	3	2	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

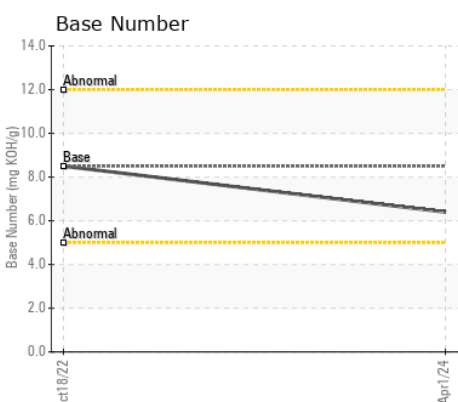
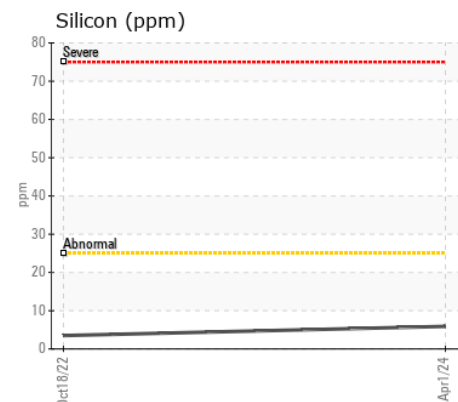
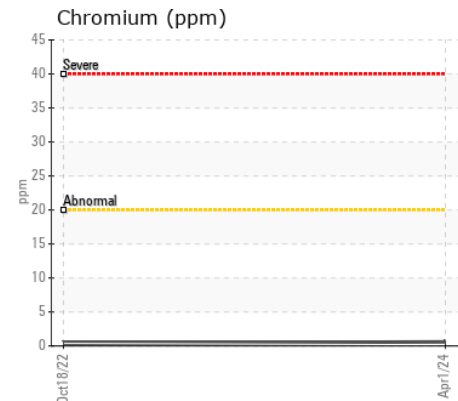
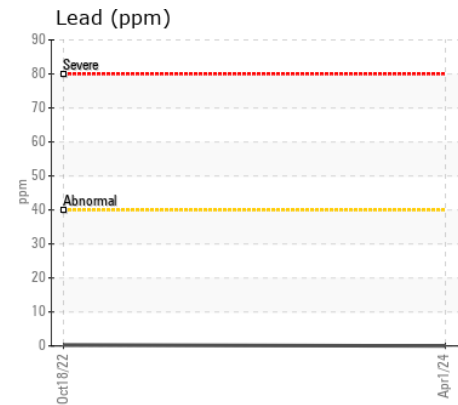
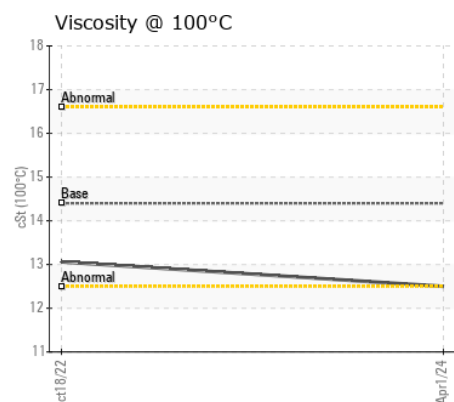
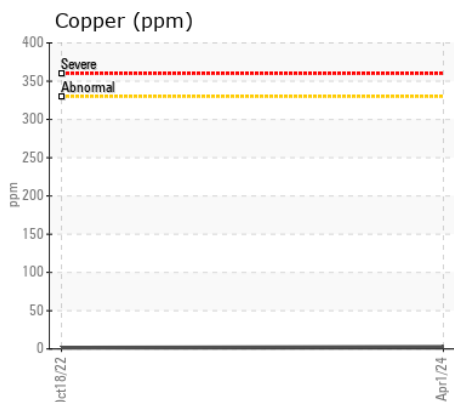
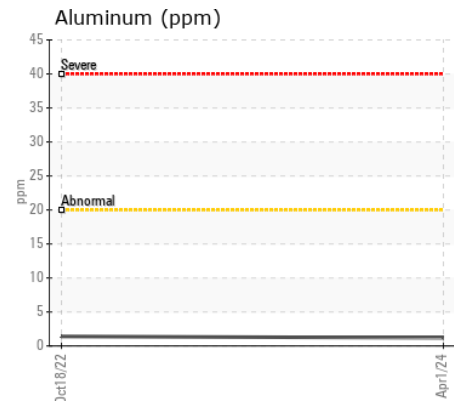
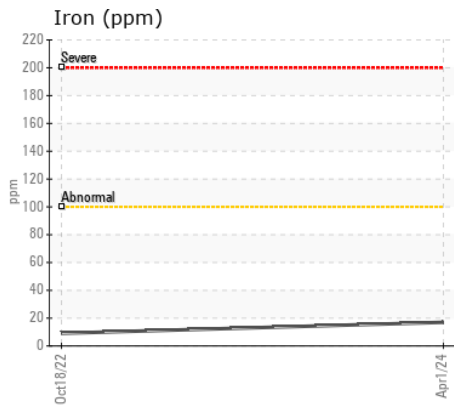
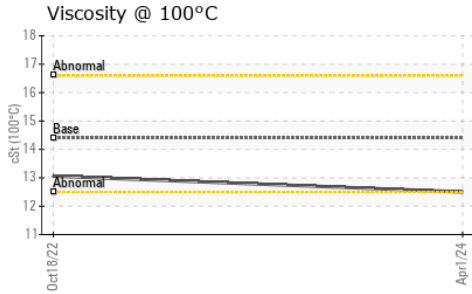
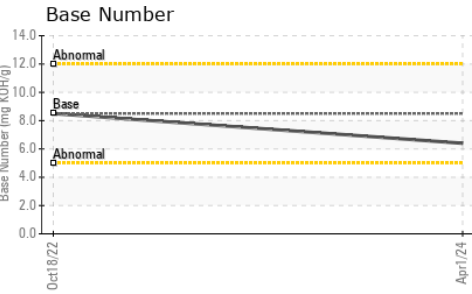
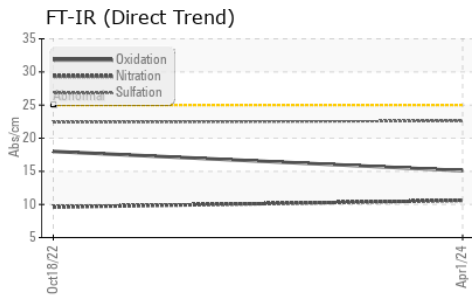
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	4	---
Potassium	ppm	ASTM D5185m	>20	2	4	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.9	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	10.6	9.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	22.4	---
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	2	1	---
Boron	ppm	ASTM D5185m	250	17	129	---
Barium	ppm	ASTM D5185m	10	<1	0	---
Molybdenum	ppm	ASTM D5185m	100	6	19	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	450	50	71	---
Calcium	ppm	ASTM D5185m	3000	2254	2198	---
Phosphorus	ppm	ASTM D5185m	1150	911	977	---
Zinc	ppm	ASTM D5185m	1350	1097	1122	---
Sulfur	ppm	ASTM D5185m	4250	4129	4259	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	18	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.4	8.5	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.5	13.06	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0021571 **Received** : 23 Apr 2024
Lab Number : 06157508 **Tested** : 24 Apr 2024
Unique Number : 10992931 **Diagnosed** : 24 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

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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)