



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
526
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0032965	DC0015605	---
Sample Date		Client Info		22 Feb 2024	18 Nov 2021	---
Machine Age	hrs	Client Info		17964	78353	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	64	65	---
Chromium	ppm	ASTM D5185m	>20	2	3	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	6	7	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	4	5	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

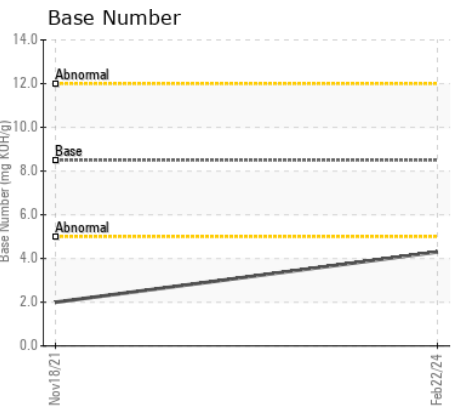
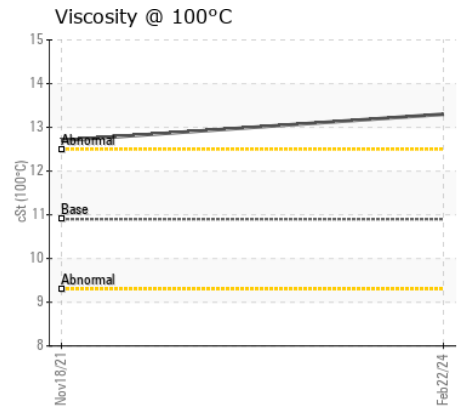
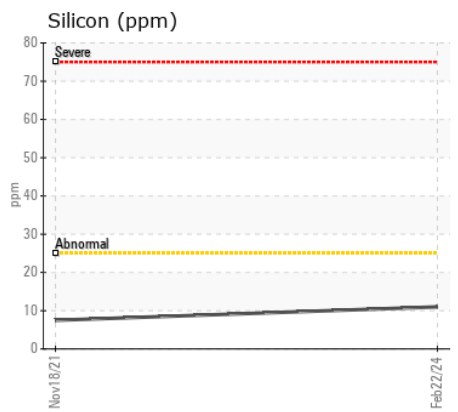
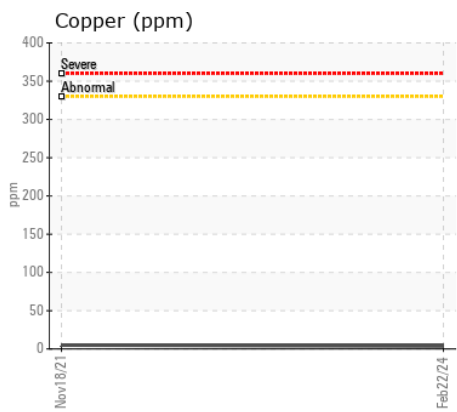
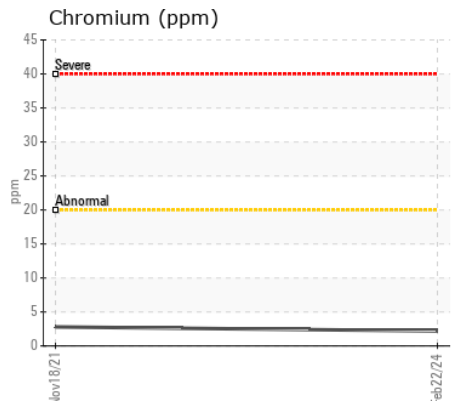
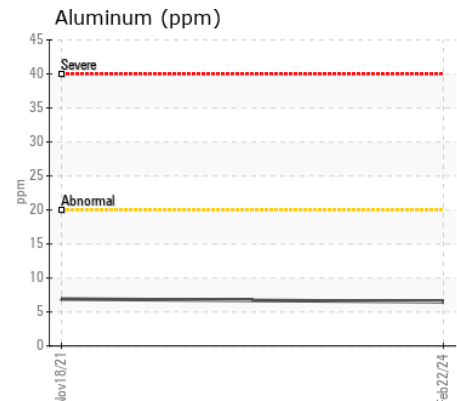
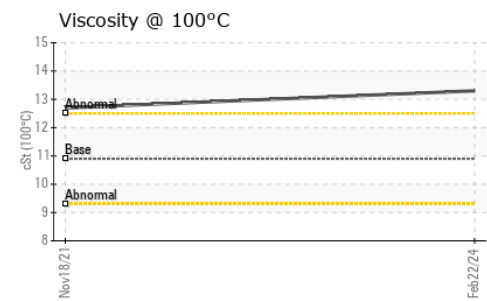
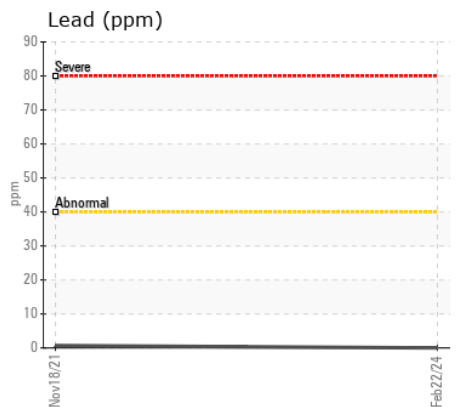
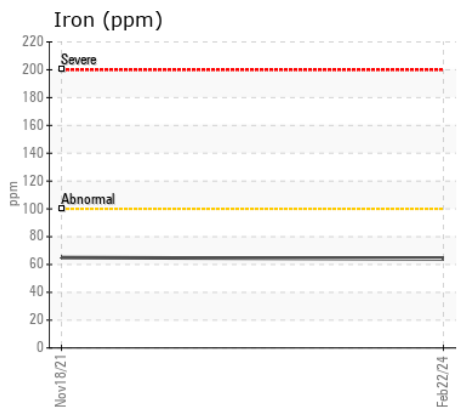
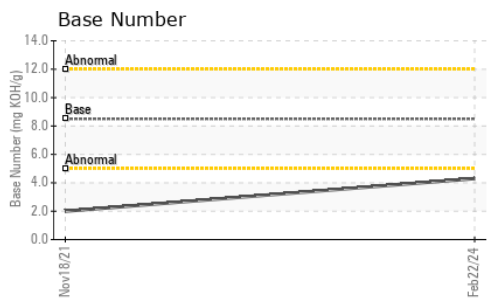
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	11	8	---
Potassium	ppm	ASTM D5185m	>20	8	8	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1	1.4	---
Nitration	Abs/cm	*ASTM D7624	>20	17.2	20.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.1	33.2	---
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		7	5	---
Boron	ppm	ASTM D5185m	250	12	22	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	52	43	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	450	745	460	---
Calcium	ppm	ASTM D5185m	3000	1600	1649	---
Phosphorus	ppm	ASTM D5185m	1150	1006	733	---
Zinc	ppm	ASTM D5185m	1350	1219	841	---
Sulfur	ppm	ASTM D5185m	4250	2818	1914	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	35.1	45.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.3	▲ 2	---
Visc @ 100°C	cSt	ASTM D445	10.9	13.3	▲ 12.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0032965 **Received** : 28 Feb 2024
Lab Number : 06103478 **Tested** : 02 Mar 2024
Unique Number : 10901708 **Diagnosed** : 02 Mar 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

FRANCIS O DAY
 14900 SOUTHLAWN LN
 ROCKVILLE, MD
 US 20850
 Contact: JAMIE FORESTER

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: