

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id **12470** Component **Diesel Engine** Filuid **DIESEL ENGINE OIL SAE 15W40 (--- GAL) RECOMMENDATION**

The oil change at the time of sampling has been noted. Resample at
the next service interval to monitor. No other corrective action is
recommended at this time. Please specify the component make and
model with your next sample.

	1

All component wear rates are normal.

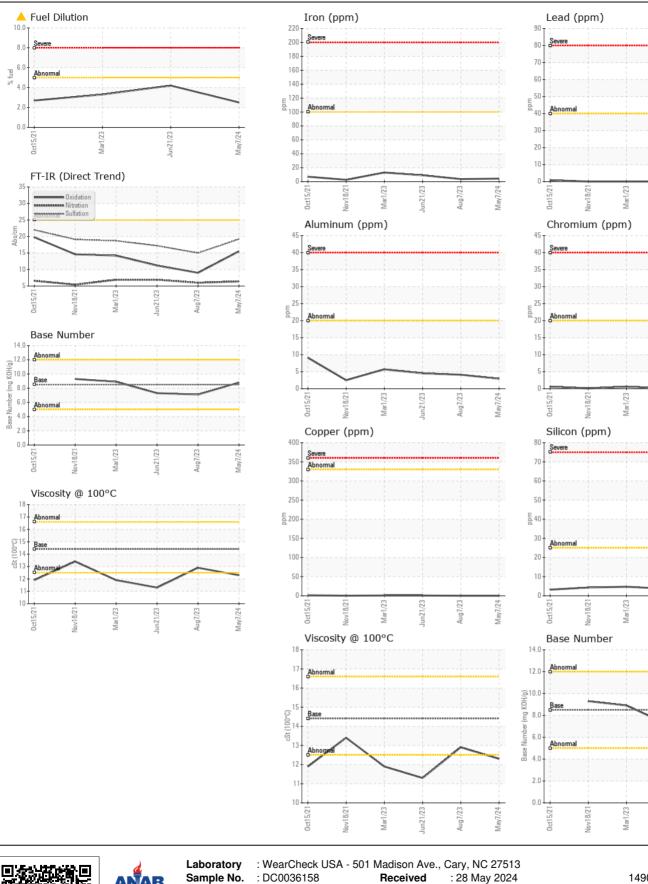
CONTAMINATION

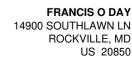
Light fuel dilution occurring. No other contaminants were detected in the oil.

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0036158	DC0029538	DC0029491
Sample Date		Client Info		07 May 2024	07 Aug 2023	21 Jun 2023
Machine Age	hrs	Client Info		6223	6025	5986
Oil Age	hrs	Client Info		0	0	150
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				MARGINAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	4	4	9
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	4	4
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	0	0	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	4	4	4
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Fuel	%	ASTM D3524	>5	4 2.5	<1.0	4 .2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.4	6.0	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	15.0	17.2
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	NORM
Odor	scalar	*Visual	NORML	NORML	NORML	NORM
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>158	3	<1	0
Boron	ppm	ASTM D5185m	250	53	3	6
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	24	2	5
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	450	411	51	66
Calcium	ppm	ASTM D5185m	3000	1776	2402	2235
Phosphorus	ppm	ASTM D5185m	1150	804	943	859
Zinc	ppm	ASTM D5185m	1350	937	1134	1021
Sulfur	ppm	ASTM D5185m	4250	3350	5073	5321
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	9.0	11.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.8	7.1	7.3
Dase Mulliper (DN)	ing KON/g	AOTIVI D2030	0.0	0.0	7.1	1.0





Jun21/23

Aug7/23 .

Aug7/23

Aug7/23

Aug7/23

un21/23

PC/LVE

un21/23

un21/23

May7/24

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.

Lab Number : 06193425

Unique Number : 11050177

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Tested

Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Diagnosed

: 31 May 2024 : 31 May 2024 - Wes Davis

> T: F:

May7/24 .

Certificate L2367

Contact/Location: JAMIE FORESTER - FRAROCDC Page 2 of 2