TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
FORD F350 C14 (S/N 1FD8X3BTVCEB75527)
Component
Diesel Engine
Fluid
TRC MOLY XL PRO-SPEC IV XP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

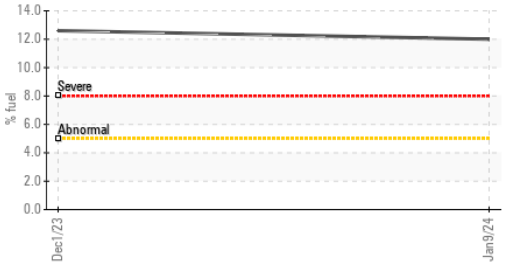
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

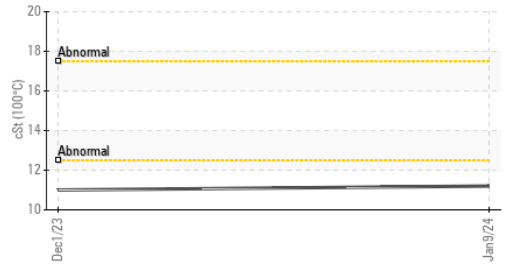
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06062198	TR06038756	---
Sample Date		Client Info		09 Jan 2024	01 Dec 2023	---
Machine Age	mls	Client Info		214608	214141	---
Oil Age	mls	Client Info		467	5000	---
Filter Age	mls	Client Info		467	5000	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				SEVERE	SEVERE	---
Iron	ppm	ASTM D5185m	>100	38	35	---
Chromium	ppm	ASTM D5185m	>20	1	1	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m	>2	<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	9	7	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	2	<1	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	12	11	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Fuel	%	ASTM D3524	>5	12.0	12.6	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	10.7	10.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	21.0	---
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	---
Sodium	ppm	ASTM D5185m		0	2	---
Boron	ppm	ASTM D5185m		3	11	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		103	107	---
Manganese	ppm	ASTM D5185m		1	<1	---
Magnesium	ppm	ASTM D5185m		77	84	---
Calcium	ppm	ASTM D5185m		3341	3414	---
Phosphorus	ppm	ASTM D5185m		727	690	---
Zinc	ppm	ASTM D5185m		871	860	---
Sulfur	ppm	ASTM D5185m		3322	3606	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.0	14.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		10.51	10.49	---
Visc @ 100°C	cSt	ASTM D445		11.2	11.0	---

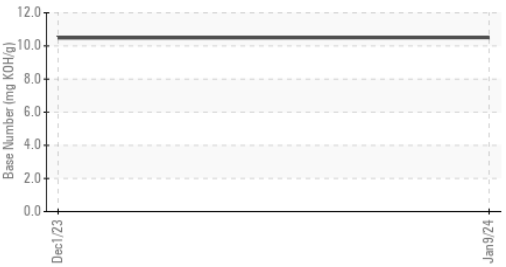
Fuel Dilution



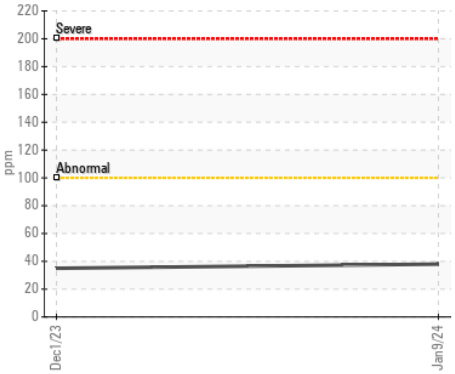
Viscosity @ 100°C



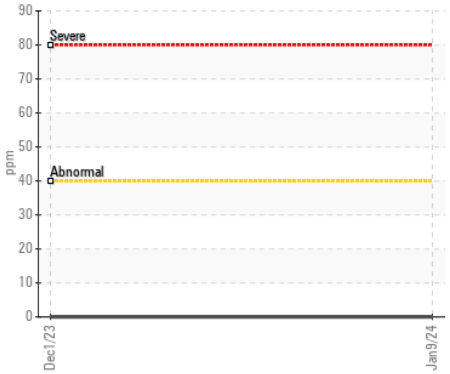
Base Number



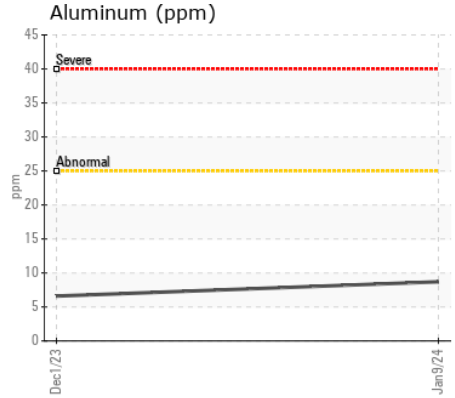
Iron (ppm)



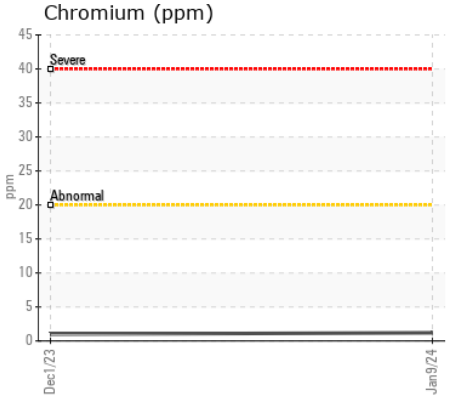
Lead (ppm)



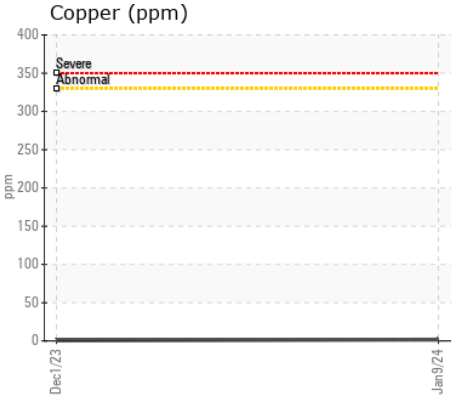
Aluminum (ppm)



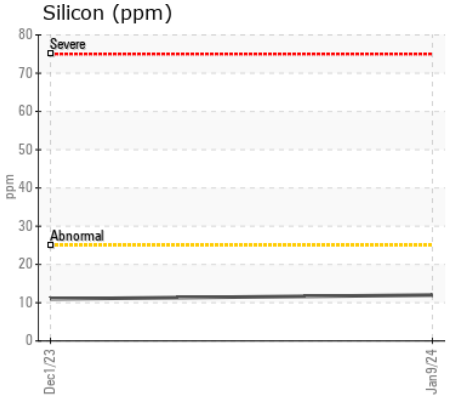
Chromium (ppm)



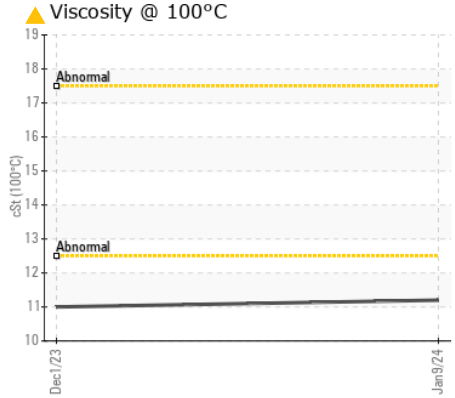
Copper (ppm)



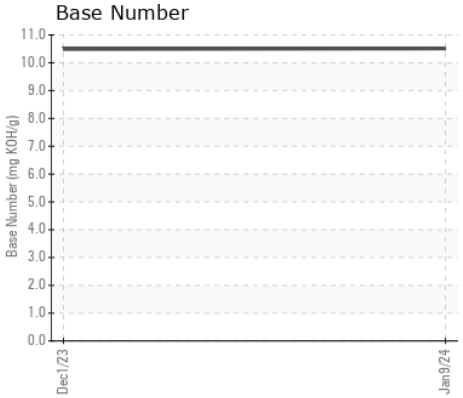
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06062198 **Recieved** : 16 Jan 2024
Lab Number : 06062198 **Diagnosed** : 18 Jan 2024
Unique Number : 10833580 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: PercentFuel)

To discuss this sample report, contact Customer Service at 1-800-827-0711.
** - 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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Contact: JEFF WARREN

T:
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