TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FORD F350 FORD F350
Component
Gasoline Engine
Fluid
TRC PRO-SPEC SYNTHETIC 5W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

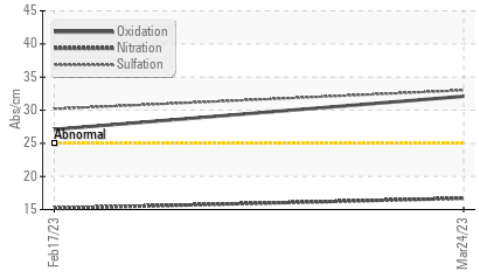
There is no indication of any contamination in the oil.

FLUID CONDITION

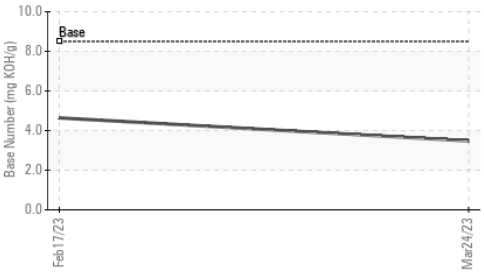
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05807076	TR05778383	---
Sample Date		Client Info		24 Mar 2023	17 Feb 2023	---
Machine Age	mls	Client Info		35000	31000	---
Oil Age	mls	Client Info		20000	12000	---
Filter Age	mls	Client Info		20000	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>150	27	22	---
Chromium	ppm	ASTM D5185m	>20	2	1	---
Nickel	ppm	ASTM D5185m	>5	<1	1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>2	<1	0	---
Aluminum	ppm	ASTM D5185m	>40	8	8	---
Lead	ppm	ASTM D5185m	>50	<1	1	---
Copper	ppm	ASTM D5185m	>155	3	3	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>30	37	32	---
Potassium	ppm	ASTM D5185m	>20	1	3	---
Fuel		WC Method	>4.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	16.7	15.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	33.0	30.2	---
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	---
Sodium	ppm	ASTM D5185m	>400	5	5	---
Boron	ppm	ASTM D5185m		10	36	---
Barium	ppm	ASTM D5185m		0	3	---
Molybdenum	ppm	ASTM D5185m	400	1246	1291	---
Manganese	ppm	ASTM D5185m		2	1	---
Magnesium	ppm	ASTM D5185m	600	466	469	---
Calcium	ppm	ASTM D5185m	1500	1452	1383	---
Phosphorus	ppm	ASTM D5185m	800	634	674	---
Zinc	ppm	ASTM D5185m	900	822	811	---
Sulfur	ppm	ASTM D5185m		3141	3568	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	32.1	27.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	3.48	4.64	---
Visc @ 100°C	cSt	ASTM D445	10.5	12.9	12.1	---

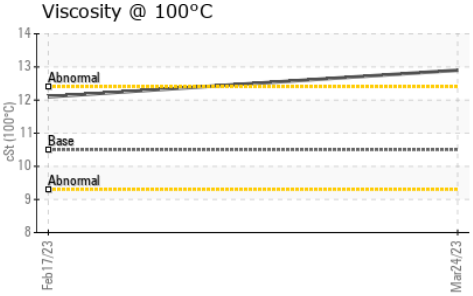
FT-IR (Direct Trend)



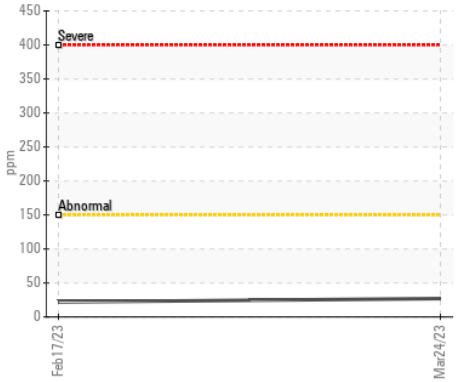
Base Number



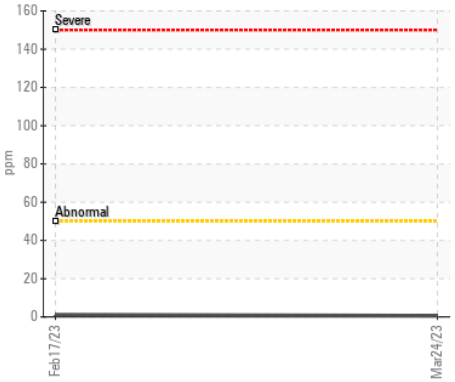
Viscosity @ 100°C



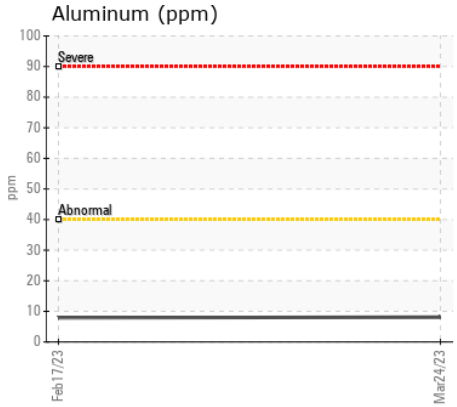
Iron (ppm)



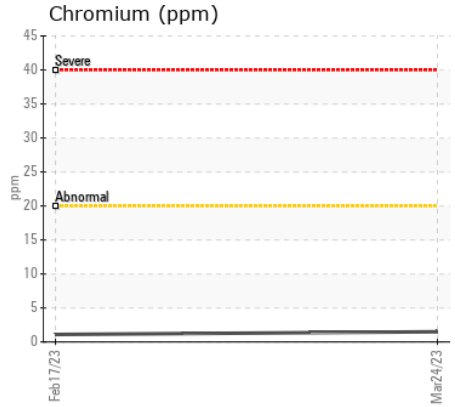
Lead (ppm)



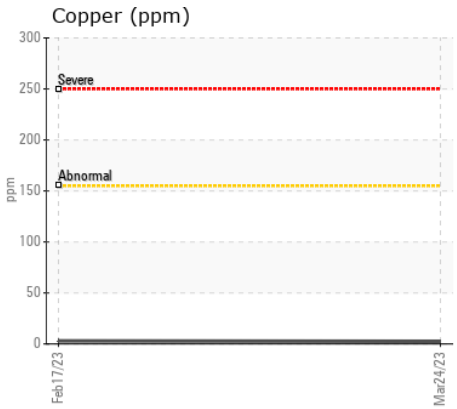
Aluminum (ppm)



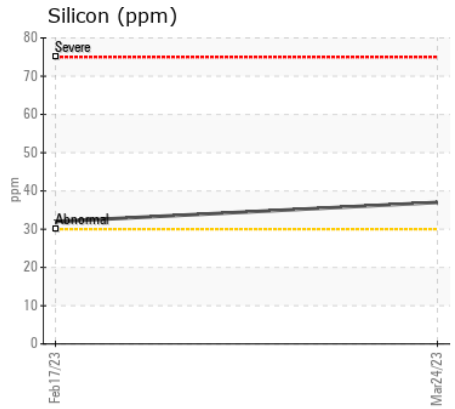
Chromium (ppm)



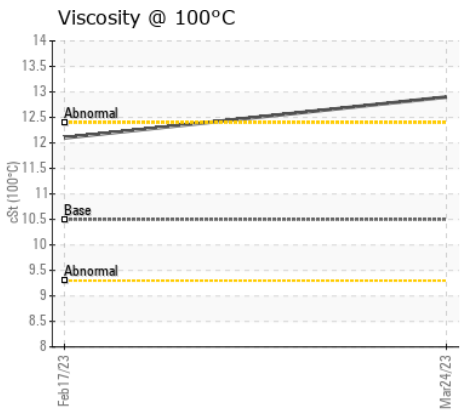
Copper (ppm)



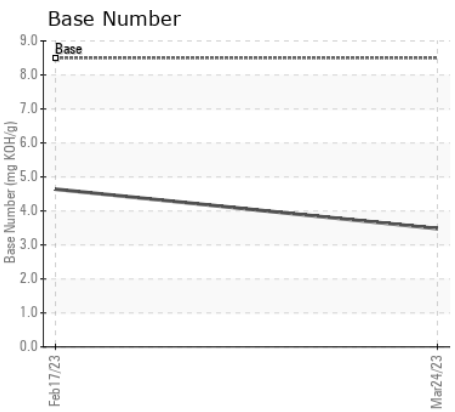
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR05807076
Lab Number : 05807076
Unique Number : 10404605
Test Package : MOB 2

Received : 30 Mar 2023
Tested : 03 Apr 2023
Diagnosed : 03 Apr 2023 - Don Baldridge

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: DAVID HOOD

T:
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