TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FORD 2019 FORD F250
Component
Diesel Engine
Fluid
TRC PROSPEC IV HD 5W40 (13 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

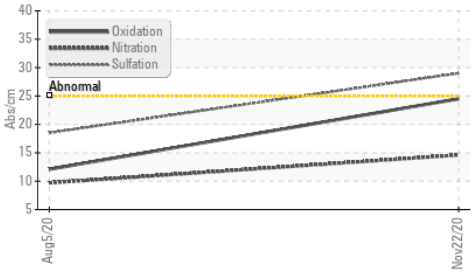
There is no indication of any contamination in the oil.

FLUID CONDITION

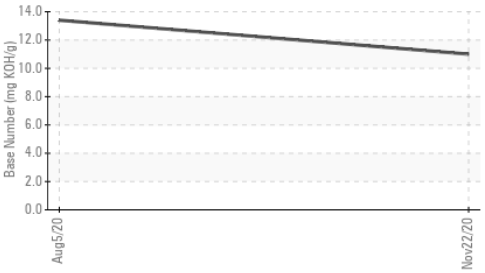
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05129619	TR05038310	---
Sample Date		Client Info		22 Nov 2020	05 Aug 2020	---
Machine Age	mls	Client Info		31285	24792	---
Oil Age	mls	Client Info		10285	3792	---
Filter Age	mls	Client Info		10285	3792	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>100	30	8	---
Chromium	ppm	ASTM D5185m	>20	1	<1	---
Nickel	ppm	ASTM D5185m	>2	<1	<1	---
Titanium	ppm	ASTM D5185m	>2	<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	3	1	---
Lead	ppm	ASTM D5185m	>40	0	2	---
Copper	ppm	ASTM D5185m	>330	3	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	9	7	---
Potassium	ppm	ASTM D5185m	>20	11	0	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	14.6	9.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	29	18.5	---
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		2	2	---
Boron	ppm	ASTM D5185m		10	12	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		2	2	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		38	34	---
Calcium	ppm	ASTM D5185m		4245	4025	---
Phosphorus	ppm	ASTM D5185m		854	822	---
Zinc	ppm	ASTM D5185m		980	929	---
Sulfur	ppm	ASTM D5185m		2968	2910	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.5	12.1	---
Base Number (BN)	mg KOH/g	ASTM D2896		11.0	13.4	---
Visc @ 100°C	cSt	ASTM D445		14.1	14.4	---

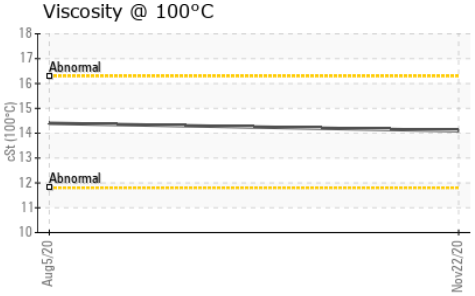
FT-IR (Direct Trend)



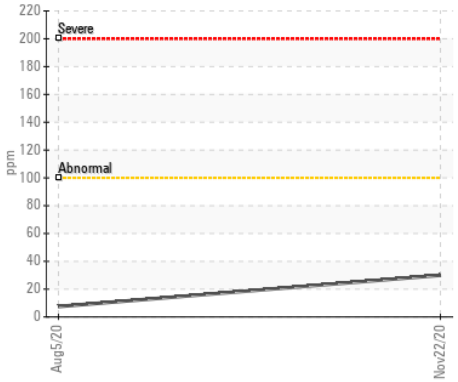
Base Number



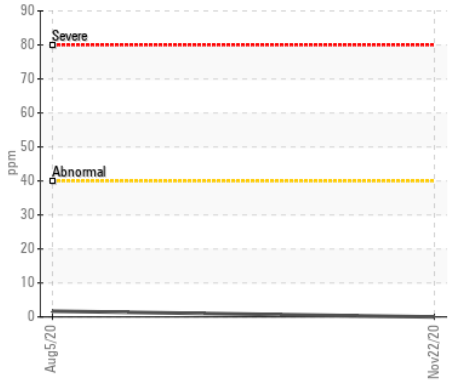
Viscosity @ 100°C



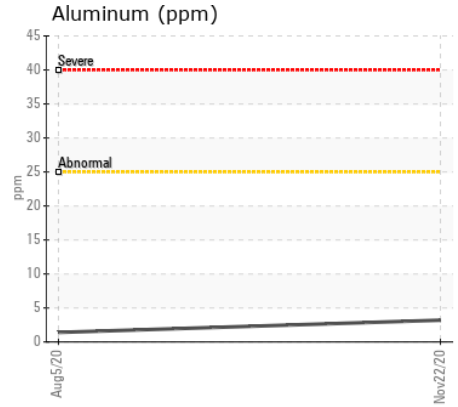
Iron (ppm)



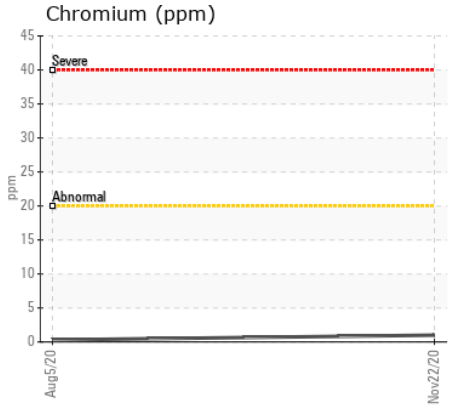
Lead (ppm)



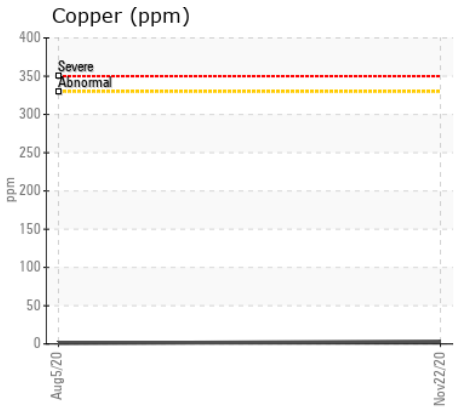
Aluminum (ppm)



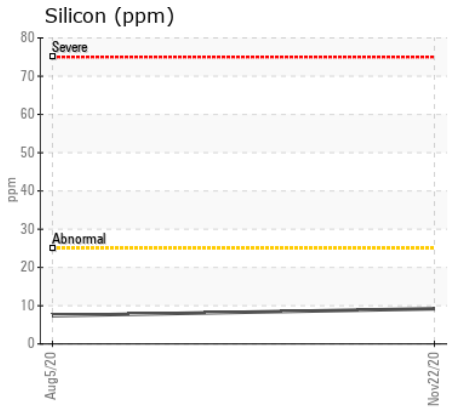
Chromium (ppm)



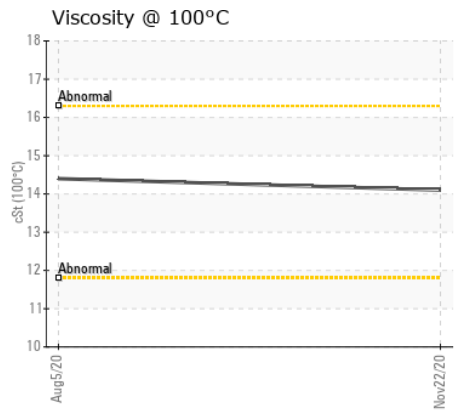
Copper (ppm)



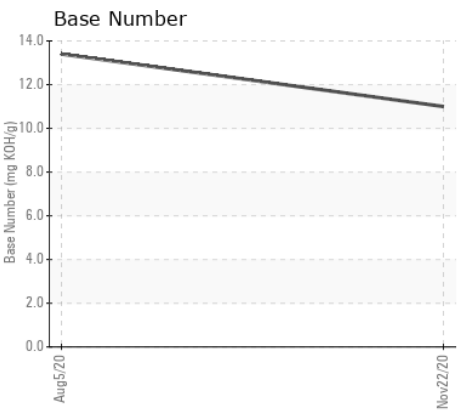
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR05129619
Lab Number : 05129619
Unique Number : 9274888
Test Package : MOB 2

Received : 04 Dec 2020
Tested : 07 Dec 2020
Diagnosed : 07 Dec 2020 - Jonathan Hester

BRYAN PARKER SERVICES
PO BOX 2406
KITTY HAWK, NC
US 27949
Contact: MICHAEL FRANCIS

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)

T:
F: