TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FORD F-350 16 (S/N B09867)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (13 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

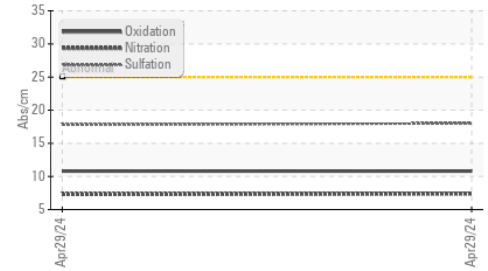
There is no indication of any contamination in the oil.

FLUID CONDITION

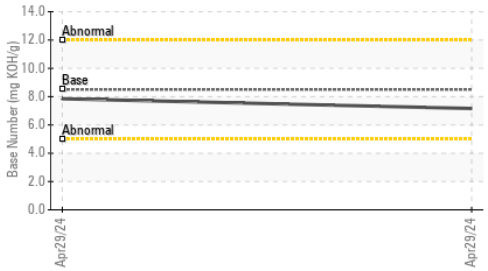
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06221442	TR06196030	---
Sample Date		Client Info		29 Apr 2024	29 Apr 2024	---
Machine Age	mls	Client Info		325076	325076	---
Oil Age	mls	Client Info		5076	5076	---
Filter Age	mls	Client Info		5076	5076	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>100	9	14	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m	>2	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	5	5	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	2	2	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	7	8	---
Potassium	ppm	ASTM D5185m	>20	2	<1	---
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	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	7.4	7.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	17.8	---
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		<1	0	---
Boron	ppm	ASTM D5185m	250	41	41	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	18	18	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m	450	142	152	---
Calcium	ppm	ASTM D5185m	3000	1987	2219	---
Phosphorus	ppm	ASTM D5185m	1150	748	874	---
Zinc	ppm	ASTM D5185m	1350	1034	1082	---
Sulfur	ppm	ASTM D5185m	4250	3229	4084	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.8	10.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.16	7.85	---
Visc @ 100°C	cSt	ASTM D445	10.9	13.1	13.0	---

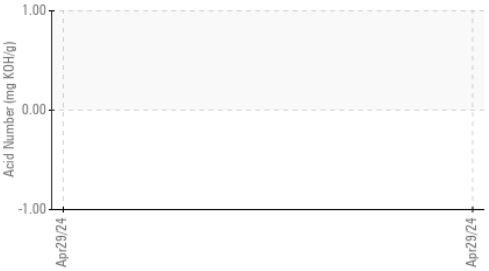
FT-IR (Direct Trend)



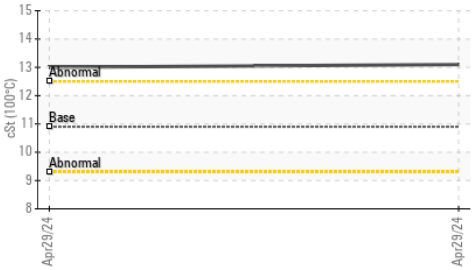
Base Number



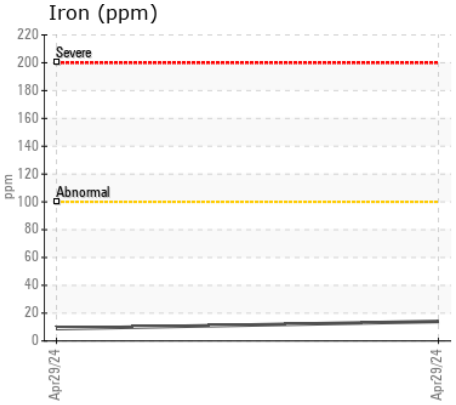
Acid Number



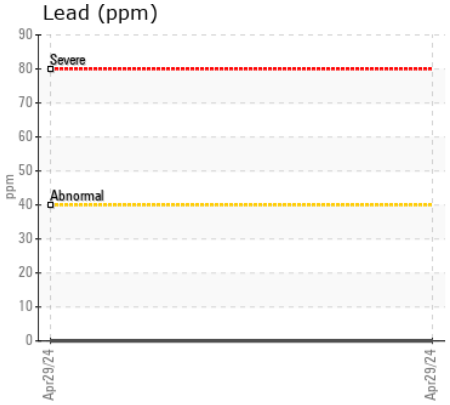
Viscosity @ 100°C



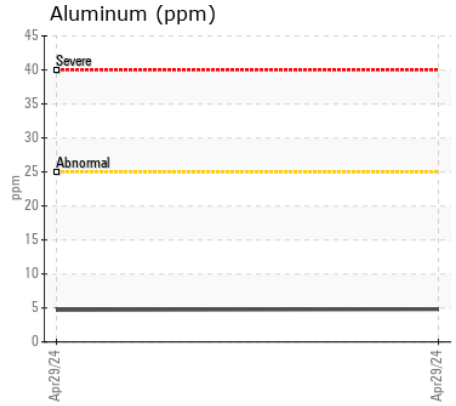
Iron (ppm)



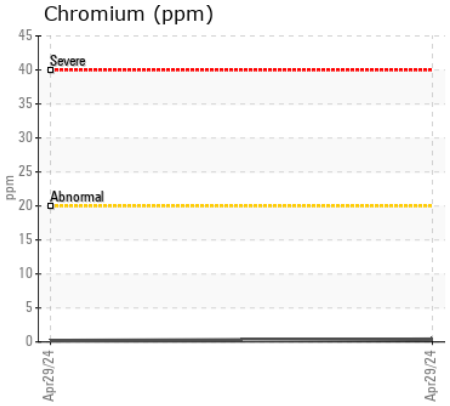
Lead (ppm)



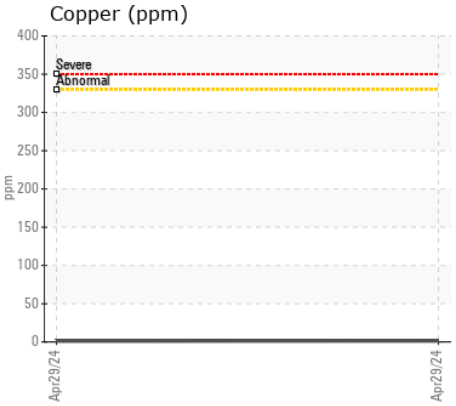
Aluminum (ppm)



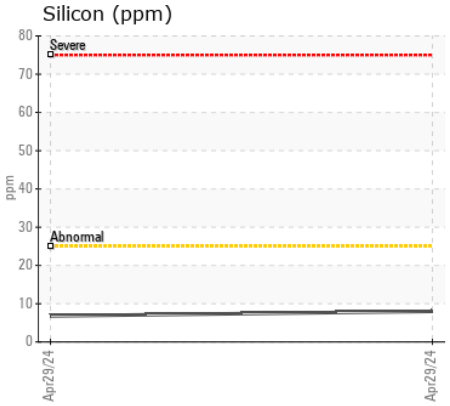
Chromium (ppm)



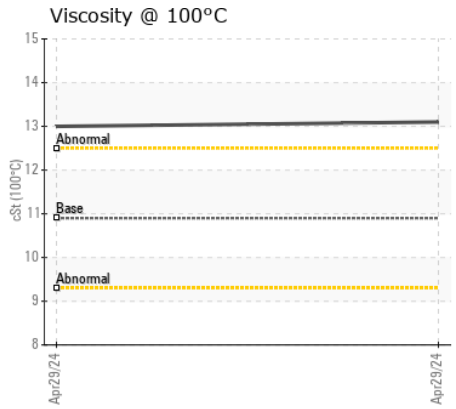
Copper (ppm)



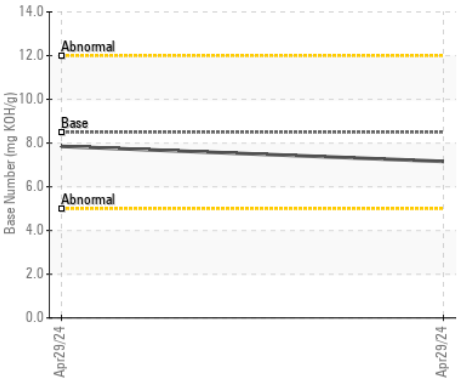
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06221442
Lab Number : 06221442
Unique Number : 11099639
Test Package : MOB 2 (Additional Tests: TAN Man)

Received : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Sean Felton

KASKI LOGGING
22411 HE CEDAR CREEK RD
AMBOY, WA
US 98601
Contact: NATHAN BYRD

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: