TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FORD 2015 EXP
Component
Gasoline Engine
Fluid
TRC PRO-SPEC MULTI-VIS SB 5W20 (6 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

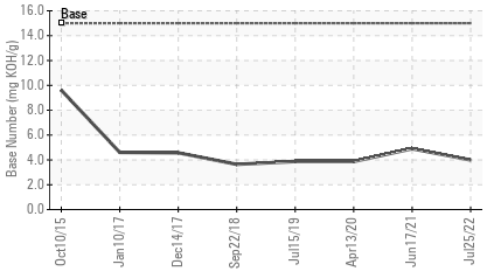
There is no indication of any contamination in the oil.

FLUID CONDITION

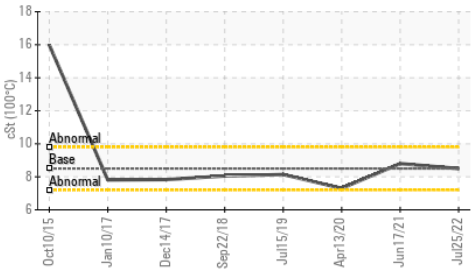
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05647348	TR05441600	TR05027064
Sample Date		Client Info		25 Jul 2022	17 Jun 2021	13 Apr 2020
Machine Age	mls	Client Info		90285	80053	71682
Oil Age	mls	Client Info		10232	8371	9529
Filter Age	mls	Client Info		10232	8371	9529
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>150	17	13	18
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>40	3	3	6
Lead	ppm	ASTM D5185m	>50	<1	<1	<1
Copper	ppm	ASTM D5185m	>155	10	15	12
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>30	10	10	9
Potassium	ppm	ASTM D5185m	>20	2	2	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	13.8	12.9	13.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.9	24.4	24.6
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	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>400	2	3	4
Boron	ppm	ASTM D5185m		22	19	17
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		141	155	117
Manganese	ppm	ASTM D5185m		4	5	6
Magnesium	ppm	ASTM D5185m		12	14	19
Calcium	ppm	ASTM D5185m	4200	1857	1994	1628
Phosphorus	ppm	ASTM D5185m	800	589	655	510
Zinc	ppm	ASTM D5185m	800	759	809	612
Sulfur	ppm	ASTM D5185m		2197	2038	1303
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.5	20.1	21
Base Number (BN)	mg KOH/g	ASTM D2896	15	3.99	4.90	3.87
Visc @ 100°C	cSt	ASTM D445	8.5	8.5	8.8	7.3

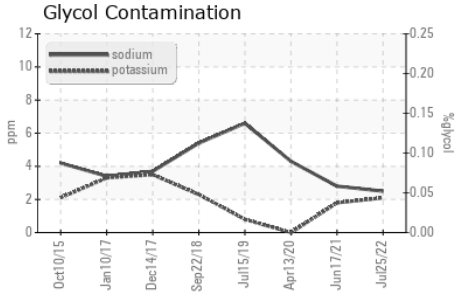
Base Number



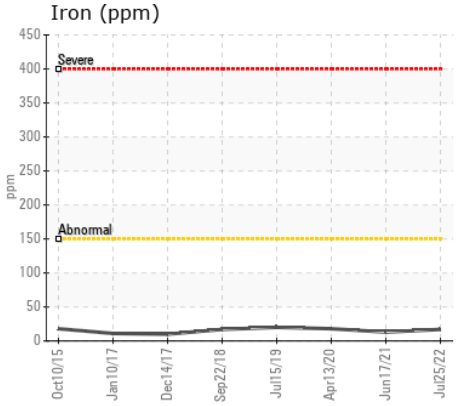
Viscosity @ 100°C



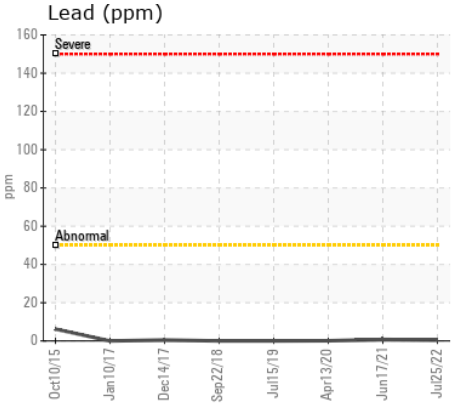
Glycol Contamination



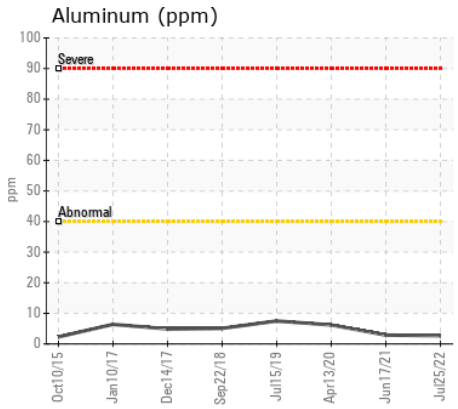
Iron (ppm)



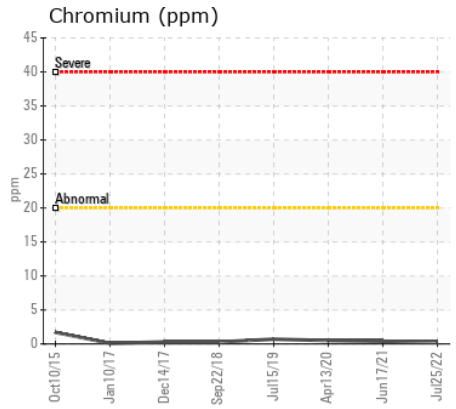
Lead (ppm)



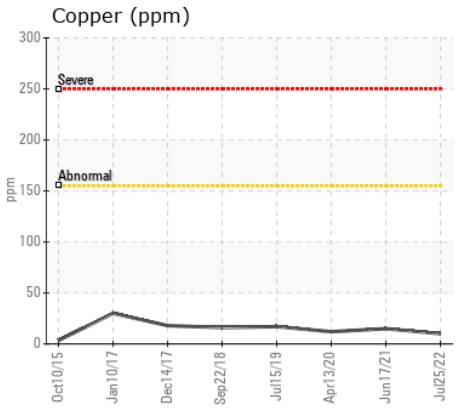
Aluminum (ppm)



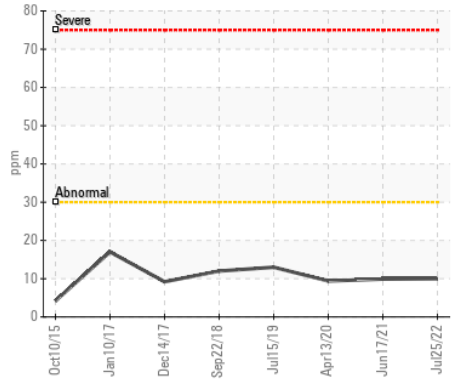
Chromium (ppm)



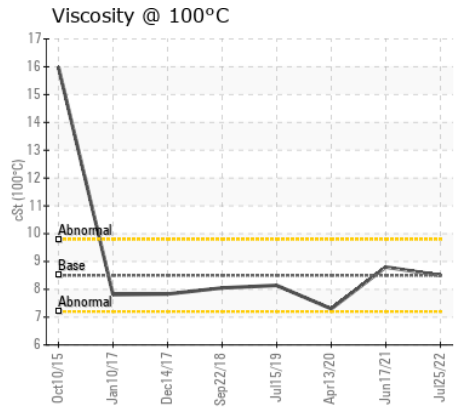
Copper (ppm)



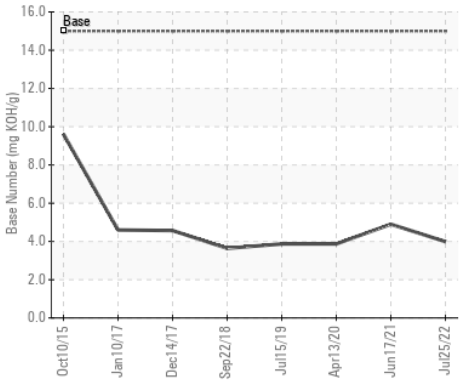
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR05647348 **Received** : 21 Sep 2022
Lab Number : 05647348 **Tested** : 23 Sep 2022
Unique Number : 10141887 **Diagnosed** : 23 Sep 2022 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: Glycol)

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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