



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**FORD 1FTEW1EPXGKD44322**  
 Component  
**Gasoline Engine**  
 Fluid  
**TRC PRO-SPEC SYNTHETIC 5W30 (--- GAL)**

**RECOMMENDATION**

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06176284</b>	TR06018428	TR05873987
Sample Date		Client Info		<b>03 May 2024</b>	17 Nov 2023	03 Jun 2023
Machine Age	mls	Client Info		<b>188480</b>	176745	164362
Oil Age	mls	Client Info		<b>11735</b>	12383	0
Filter Age	mls	Client Info		<b>11735</b>	12383	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>42</b>	33	50
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>40	<b>5</b>	5	6
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>155	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

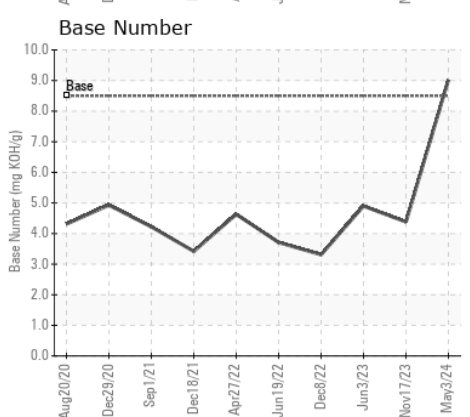
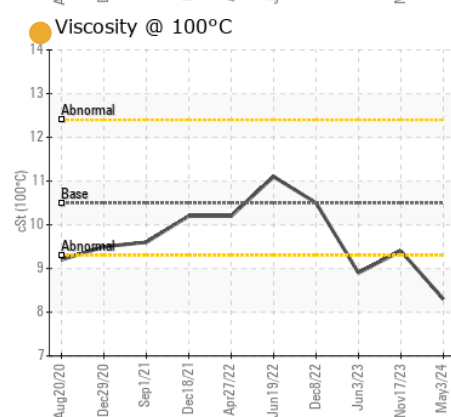
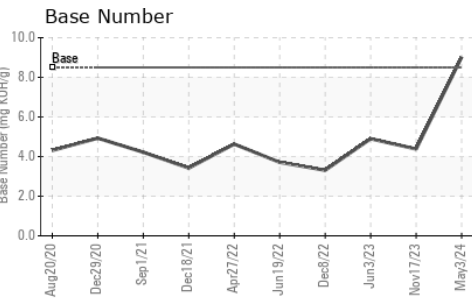
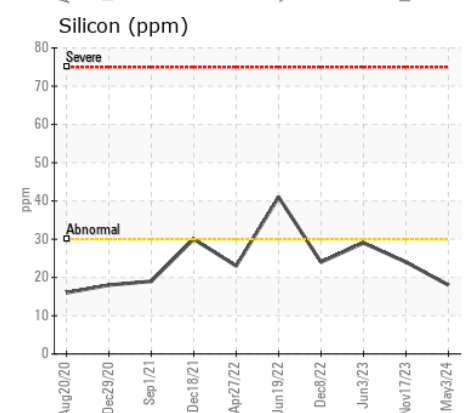
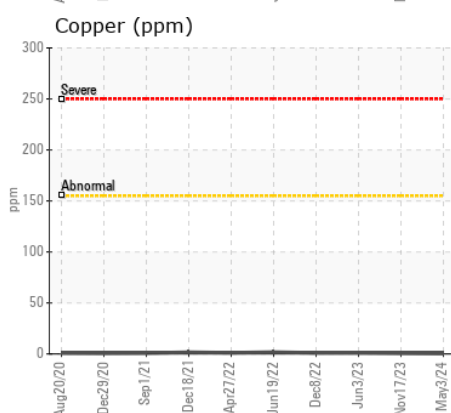
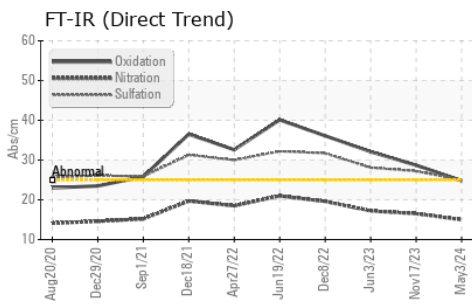
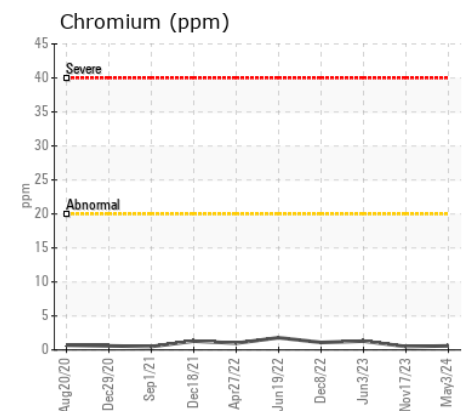
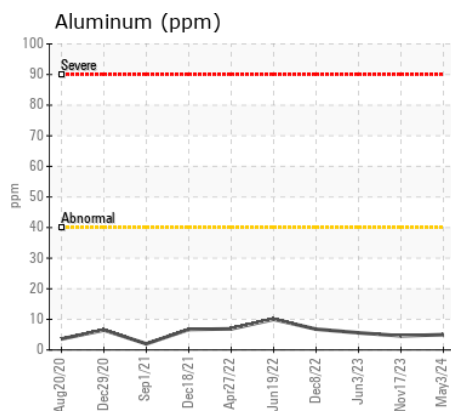
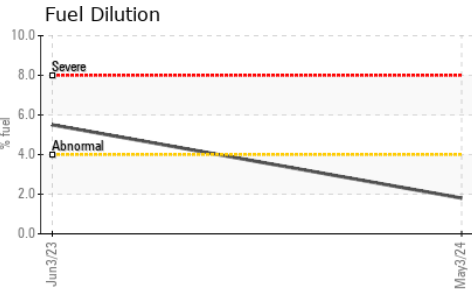
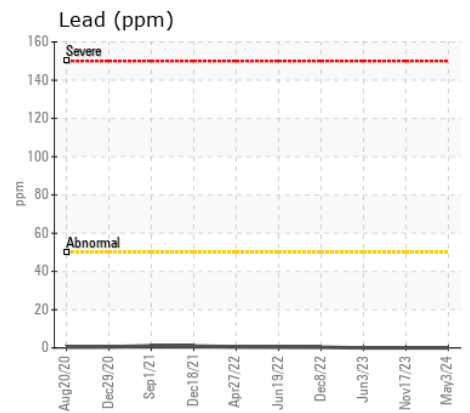
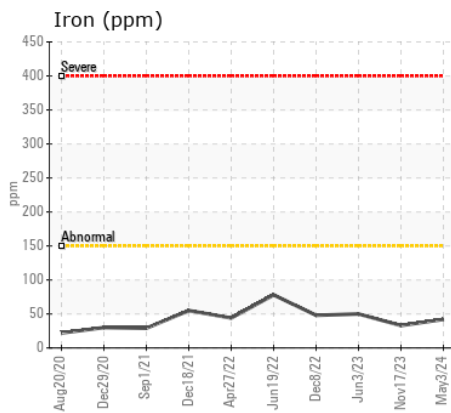
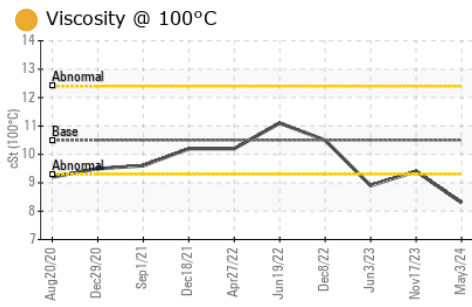
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>18</b>	24	29
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	4
Fuel	%	ASTM D3524	>4.0	<b>1.8</b>	<1.0	▲ 5.5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>15.0</b>	16.5	17.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.0</b>	27.2	28.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>400	<b>4</b>	8	2
Boron	ppm	ASTM D5185m		<b>13</b>	13	10
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	3
Molybdenum	ppm	ASTM D5185m	400	<b>243</b>	247	229
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	600	<b>412</b>	443	405
Calcium	ppm	ASTM D5185m	1500	<b>1321</b>	1366	1202
Phosphorus	ppm	ASTM D5185m	800	<b>613</b>	669	573
Zinc	ppm	ASTM D5185m	900	<b>742</b>	765	715
Sulfur	ppm	ASTM D5185m		<b>2111</b>	1917	1872
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.8</b>	28.7	32.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.02</b>	4.38	4.90
Visc @ 100°C	cSt	ASTM D445	10.5	<b>8.3</b>	9.4	▲ 8.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06176284  
**Lab Number** : 06176284  
**Unique Number** : 11022337  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

**Received** : 10 May 2024  
**Tested** : 16 May 2024  
**Diagnosed** : 16 May 2024 - Jonathan Hester

**MIKE DAVIDSON**  
 6426 W RD 25  
 ULYSSES, KS  
 US 67880

Contact: MIKE DAVIDSON  
 MIKE.DAVIDSON225@GMAIL.COM

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: