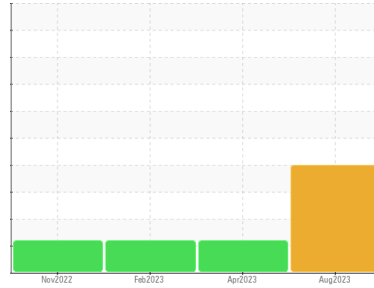




PROBLEM SUMMARY

Sample Rating Trend



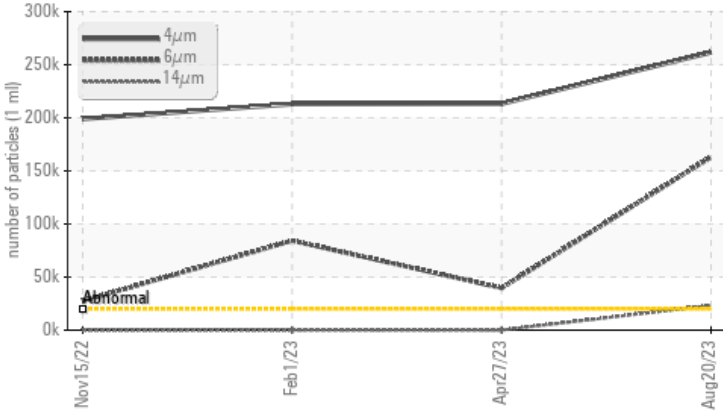
WATER



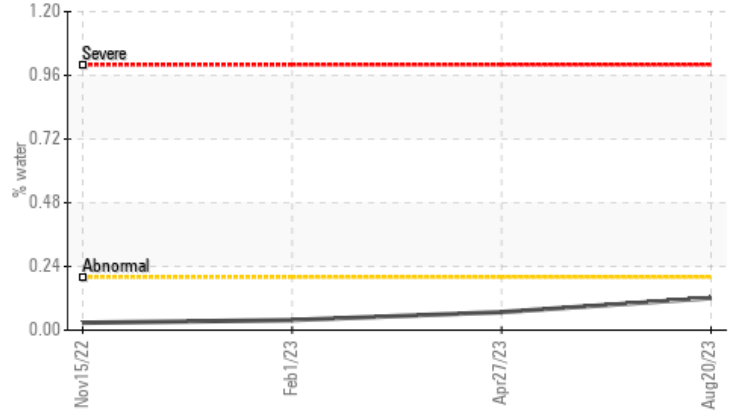
Machine Id
FORD 2015 FORD F-250 XL (S/N 1FT7X2B68FEA58618)
 Component
Gasoline Engine
 Fluid
MOBIL MOBIL 1 EXT PERFORMANCE 5W20 (7 QTS)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Water



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.2	▲ 0.121	0.068	0.038
ppm Water	ppm	ASTM D6304	>2000	▲ 1219.9	689.2	388.1
Particles >4µm		ASTM D7647	>20000	▲ 261596	▲ 213196	▲ 212870
Particles >6µm		ASTM D7647	>5000	▲ 163108	▲ 39653	▲ 84283
Particles >14µm		ASTM D7647	>640	▲ 23277	7	22
Particles >21µm		ASTM D7647	>160	▲ 7890	1	2
Particles >38µm		ASTM D7647	>40	▲ 183	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 25/25/22	▲ 25/22/10	▲ 25/24/12

Customer Id: USPLIN
 Sample No.: USP242366
 Lab Number: 05929624
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

27 Apr 2023 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



01 Feb 2023 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



15 Nov 2022 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

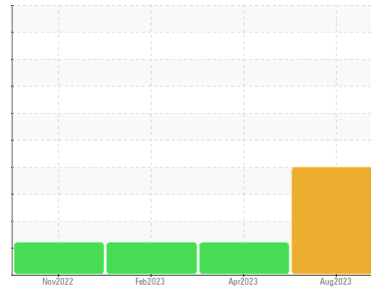
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
FORD 2015 FORD F-250 XL (S/N 1FT7X2B68FEA58618)

Component
Gasoline Engine

Fluid
MOBIL MOBIL 1 EXT PERFORMANCE 5W20 (7 QTS)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates present in the oil. There is a trace of moisture present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	USP242366	USP242282	USP242052
Sample Date	Client Info	20 Aug 2023	27 Apr 2023	01 Feb 2023
Machine Age	mls	Client Info	0	0
Oil Age	mls	Client Info	0	4778
Oil Changed	Client Info	N/A	N/A	Changed
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>150	18	22
Chromium	ppm	ASTM D5185m	>20	<1	1
Nickel	ppm	ASTM D5185m	>5	0	0
Titanium	ppm	ASTM D5185m		<1	0
Silver	ppm	ASTM D5185m	>2	0	0
Aluminum	ppm	ASTM D5185m	>40	4	2
Lead	ppm	ASTM D5185m	>50	0	0
Copper	ppm	ASTM D5185m	>155	<1	<1
Tin	ppm	ASTM D5185m	>10	0	0
Vanadium	ppm	ASTM D5185m		<1	0
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	100	19	32
Barium	ppm	ASTM D5185m		0	0
Molybdenum	ppm	ASTM D5185m	80	73	80
Manganese	ppm	ASTM D5185m		<1	<1
Magnesium	ppm	ASTM D5185m	800	492	492
Calcium	ppm	ASTM D5185m	1125	929	910
Phosphorus	ppm	ASTM D5185m	720	581	625
Zinc	ppm	ASTM D5185m	790	694	752
Sulfur	ppm	ASTM D5185m	2100	2867	2807

CONTAMINANTS

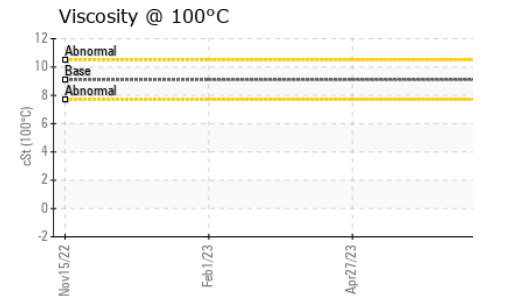
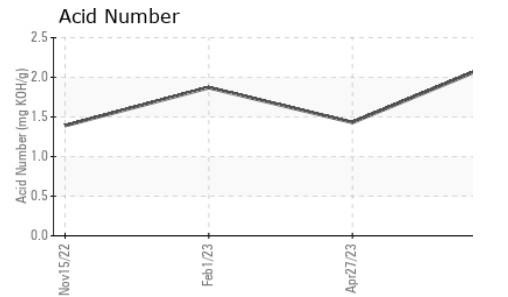
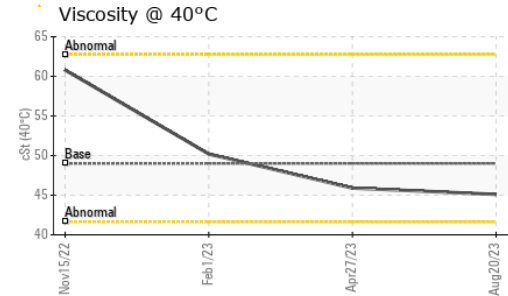
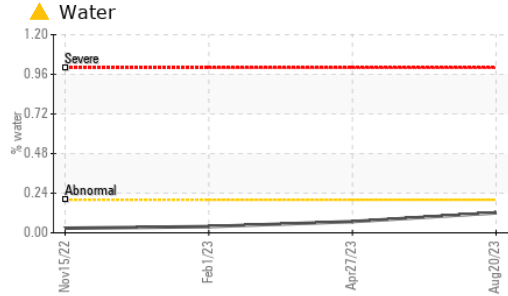
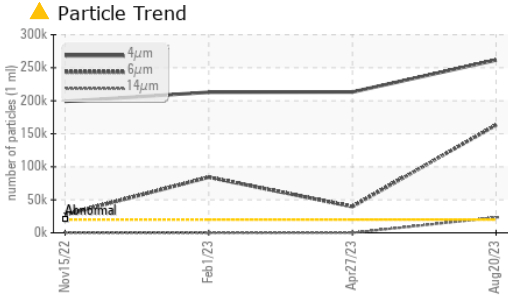
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	13	13
Sodium	ppm	ASTM D5185m	>400	5	3
Potassium	ppm	ASTM D5185m	>20	2	2
Water	%	ASTM D6304	>0.2	▲ 0.121	0.068
ppm Water	ppm	ASTM D6304	>2000	▲ 1219.9	689.2

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 261596	▲ 213196
Particles >6µm	ASTM D7647	>5000	▲ 163108	▲ 39653
Particles >14µm	ASTM D7647	>640	▲ 23277	7
Particles >21µm	ASTM D7647	>160	▲ 7890	1
Particles >38µm	ASTM D7647	>40	▲ 183	0
Particles >71µm	ASTM D7647	>10	1	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 25/25/22	▲ 25/22/10



OIL ANALYSIS REPORT

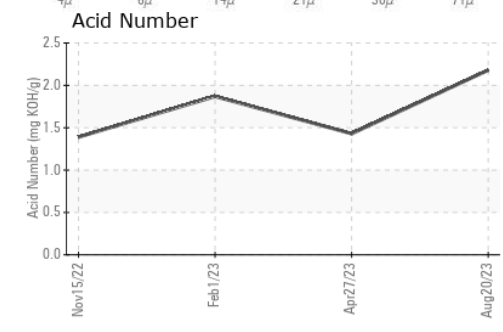
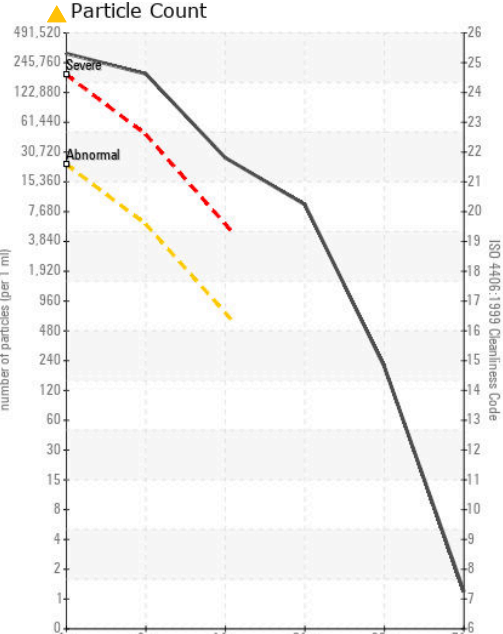
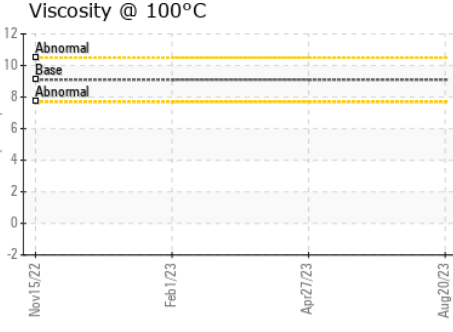
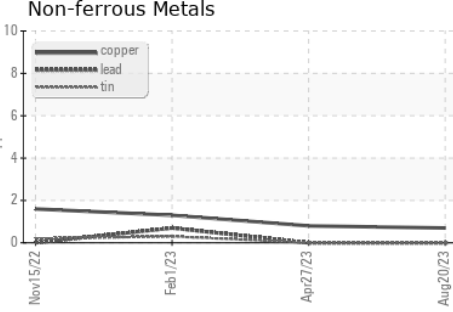
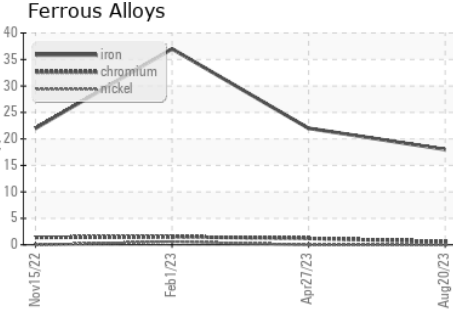


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		2.18	1.43	1.87

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	LIGHT	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
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	49	45.1	45.9	50.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP242366 **Received** : 21 Aug 2023
Lab Number : 05929624 **Diagnosed** : 22 Aug 2023
Unique Number : 10609571 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KV100)

US PETROLON INDUSTRIAL
 447 N 66TH ST, UNIT 3
 LINCOLN, NE
 US 68505-2429
 Contact: BRENT SMITH RICHARD RICKELS
 brent.smith@uspetrolon.com; canastasio@wearcheckusa.com
 T: (402)423-6375
 F: (402)423-6661

Certificate L2367
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - 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)