



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FORD 284
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 5W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0004746	RW0004299	RW0002747
Sample Date		Client Info		19 Apr 2024	30 May 2023	26 Jul 2022
Machine Age	mls	Client Info		25260	2230	0
Oil Age	mls	Client Info		2656	2230	460
Filter Age	mls	Client Info		2656	0	460
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	19	20	29
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	<1	4
Lead	ppm	ASTM D5185m	>40	0	0	1
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	0	0	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

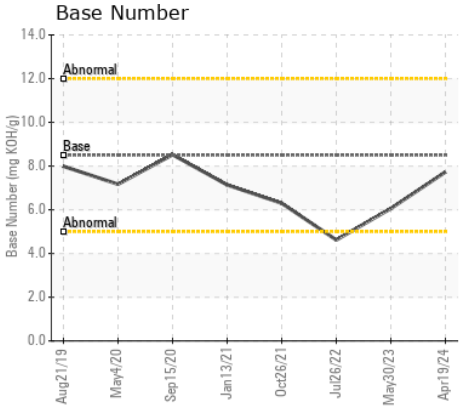
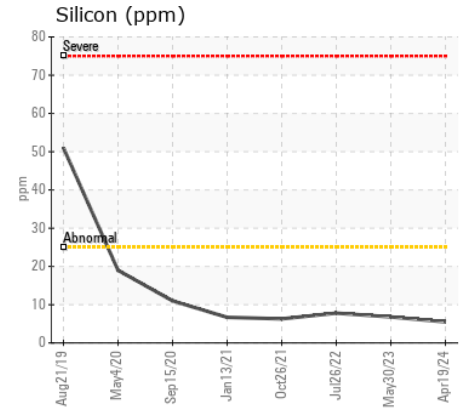
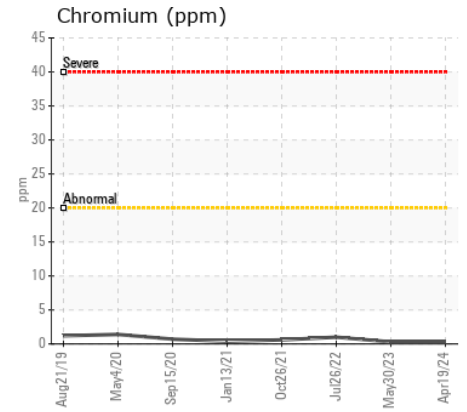
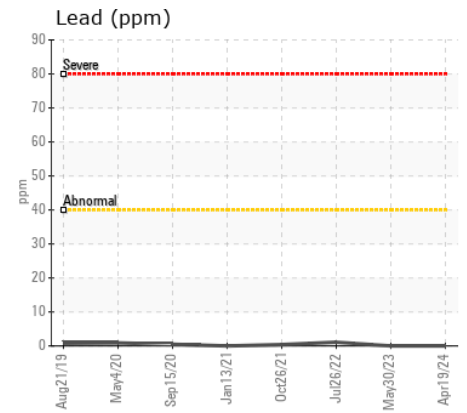
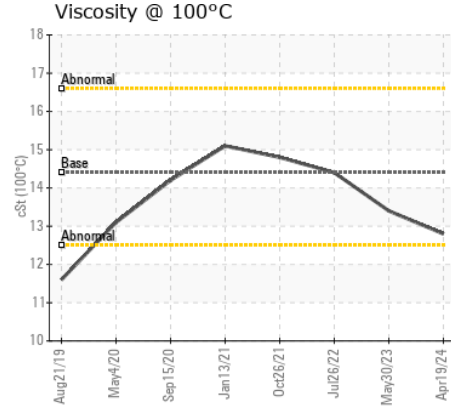
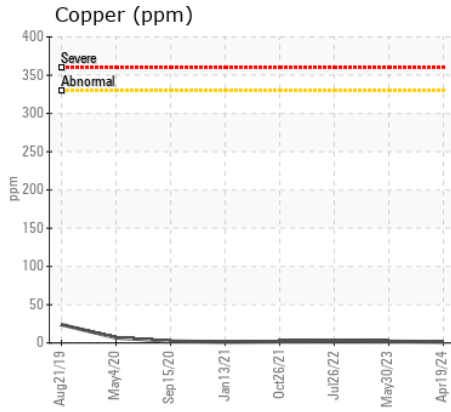
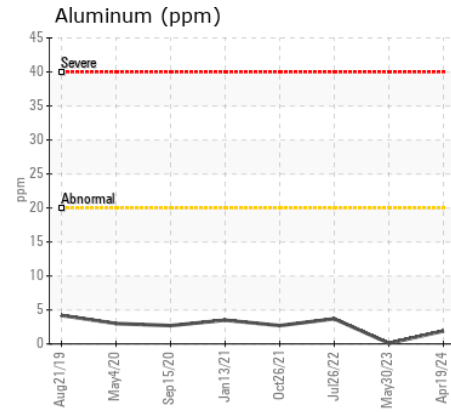
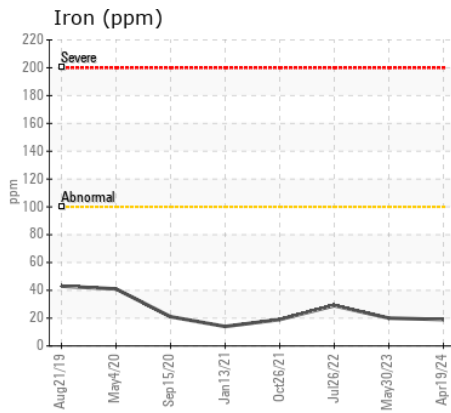
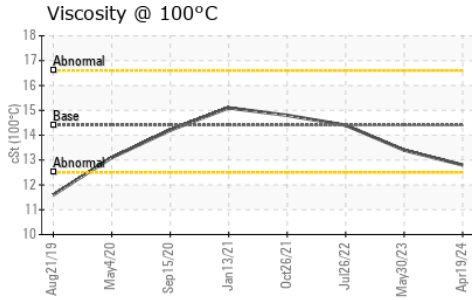
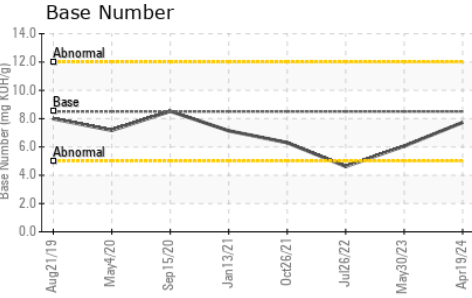
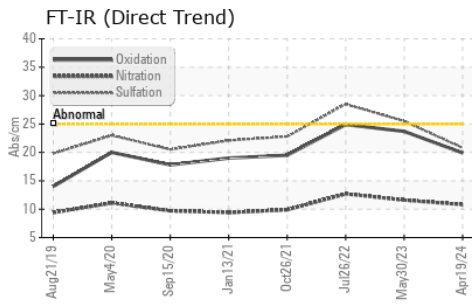
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	7	8
Potassium	ppm	ASTM D5185m	>20	1	<1	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	10.8	11.6	12.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	25.5	28.5
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

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.

Sodium	ppm	ASTM D5185m	>44	4	12	7
Boron	ppm	ASTM D5185m	250	15	80	69
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	51	3	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	867	90	102
Calcium	ppm	ASTM D5185m	3000	1319	1942	1630
Phosphorus	ppm	ASTM D5185m	1150	1105	854	815
Zinc	ppm	ASTM D5185m	1350	1336	1025	927
Sulfur	ppm	ASTM D5185m	4250	3901	3601	3261
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	23.7	24.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.73	6.06	4.62
Visc @ 100°C	cSt	ASTM D445	14.4	12.8	13.4	14.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0004746
Lab Number : 06161029
Unique Number : 10996452
Test Package : MOB 2
Received : 25 Apr 2024
Tested : 26 Apr 2024
Diagnosed : 26 Apr 2024 - Wes Davis

CITY OF FARMINGTON HILLS
 27245 HALSTED RD
 FARMINGTON HILLS, MI
 US 48331
 Contact: JERRY BROCK
 jbrock@fhgov.com
 T: (248)871-2850
 F:

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)