

Machine Id

WEAR	
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

FORD 710-02							
Component							
DURALENE Dura-Max 15W40 ( QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
RECOMMENDATION	Sample Number	00101	Client Info	LIIIIUADII	DC0036512	DC0014356	DC0014378
Resample at the next service interval to monitor.	Sample Date		Client Info		20 Jun 2024	03 Feb 2023	04 Feb 2022
	Machine Age	mls	Client Info		265113	255362	251633
	Oil Age	mls	Client Info		5000	3729	4777
	Filter Age	mls	Client Info		5000	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
	lron			. 100	00	04	
WEAR Metal levels are typical for a new component breaking in.	Iron Chromium	ppm	ASTM D5185m ASTM D5185m		29 1	31 <1	41
	Nickel	ppm ppm	ASTM D5185m		1	<1	1
	Titanium	ppm	ASTM D5185m		<1	0	<1
	Silver	ppm	ASTM D5185m		<1	0	0
	Aluminum	ppm	ASTM D5185m		2	2	<1
	Lead	ppm	ASTM D5185m		1	2	2
	Copper	ppm	ASTM D5185m	>330	2	2	4
	Tin	ppm	ASTM D5185m	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon					[	
		nnm		<u><u></u>26</u>	Q	6	0
		ppm	ASTM D5185m		8	6	9
There is no indication of any contamination in the oil.	Potassium	ppm ppm	ASTM D5185m	>20	2	0	1
			ASTM D5185m WC Method	>20 >5			1 <1.0
	Potassium Fuel		ASTM D5185m	>20 >5	2 <1.0	0 <1.0	1
	Potassium Fuel Water		ASTM D5185m WC Method WC Method	>20 >5 >0.2	2 <1.0 NEG	0 <1.0 NEG	1 <1.0 NEG
	Potassium Fuel Water Glycol	ppm	ASTM D5185m WC Method WC Method WC Method	>20 >5 >0.2 >3	2 <1.0 NEG NEG	0 <1.0 NEG NEG	1 <1.0 NEG NEG
	Potassium Fuel Water Glycol Soot %	ppm %	ASTM D5185m WC Method WC Method WC Method *ASTM D7844	>20 >5 >0.2 >3 >20	2 <1.0 NEG NEG 0.5	0 <1.0 NEG NEG 0.1	1 <1.0 NEG 0.6
	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt	ppm % Abs/cm	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *ASTM D7415 *Visual	>20 >5 >0.2 >3 >20 >30 NONE	2 <1.0 NEG 0.5 7.0 19.4 NONE	0 <1.0 NEG 0.1 11.0 21.9 NONE	1 <1.0 NEG 0.6 8.1 19.2 NONE
	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris	ppm % Abs/cm Abs/1mm scalar scalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual	>20 >5 >0.2 >3 >20 >30 NONE NONE	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE	1 <1.0 NEG NEG 0.6 8.1 19.2 NONE NONE
	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt	ppm % Abs/cm Abs/1mm scalar scalar scalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *ASTM D7415 *Visual *Visual *Visual	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE	1 <1.0 NEG NEG 0.6 8.1 19.2 NONE NONE NONE
	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance	ppm % Abs/cm Abs/1mm scalar scalar scalar scalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *ASTM D7415 *Visual *Visual *Visual *Visual	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORM	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORE	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NONE
	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor	9% Abs/cm Abs/.1mm scalar scalar scalar scalar scalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORE NORML	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML NORML	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NONE NORML NORML
	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance	9% Abs/cm Abs/.1mm scalar scalar scalar scalar scalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *ASTM D7415 *Visual *Visual *Visual *Visual	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORM	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORE	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NONE
There is no indication of any contamination in the oil.	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor	9% Abs/cm Abs/.1mm scalar scalar scalar scalar scalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORE NORML	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML NORML	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NONE NORML NORML
There is no indication of any contamination in the oil.	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water	9% Abs/cm Abs/.1mm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORML NORML NEG	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML NORML NEG	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NORE NORML NORML NEG
There is no indication of any contamination in the oil. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORML NORML NEG	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML NORML NEG 3	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NORML NORML NEG 2
There is no indication of any contamination in the oil.	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm % Abs/cm Abs/1mm scalar scalar scalar scalar scalar scalar scalar gcalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORML NORML NEG 1 9	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NORML NORML NORML NEG 3 6 0 4	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NORML NORML NEG 2 7
There is no indication of any contamination in the oil. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *STM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORML NORML NEG 1 9 0 6 <1	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML NORML NEG 3 6 0 4 <1	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NORML NORML NEG 2 7 0 7 0 7 <1
There is no indication of any contamination in the oil. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar scalar gcalar	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORML NORML NEG 1 9 0 6 <1 57	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML NORML NEG 3 6 0 4 <1 40	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NORML NORML NEG 2 7 0 7 <1 7
There is no indication of any contamination in the oil. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORML NORML NEG 1 9 0 6 <1 57 2361	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML NORML NEG 3 6 0 4 <1 40 2374	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NORML NORML NEG 2 7 0 7 <1 7 6 2638
There is no indication of any contamination in the oil. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the	Potassium Fuel Vater Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm % Abs/cm Abs/cm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORML NCRML NEG 1 9 0 6 <1 57 2361 975	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML NORML NEG 3 6 0 4 <1 40 2374 860	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NORML NORML NEG 2 7 0 7 <1 76 2638 969
There is no indication of any contamination in the oil. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the	Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORML NORML	2 <1.0 NEG 0.5 7.0 19.4 NONE NONE NONE NORML NORML NEG 1 9 0 6 <1 57 2361	0 <1.0 NEG 0.1 11.0 21.9 NONE NONE NONE NORML NORML NEG 3 6 0 4 <1 40 2374	1 <1.0 NEG 0.6 8.1 19.2 NONE NONE NONE NORML NORML NEG 2 7 0 7 <1 7 6 2638

Oxidation

Visc @ 100°C cSt

Abs/.1mm \*ASTM D7414 >25

ASTM D445

Base Number (BN) mg KOH/g ASTM D2896

17.5

4.5

13.0

11.3

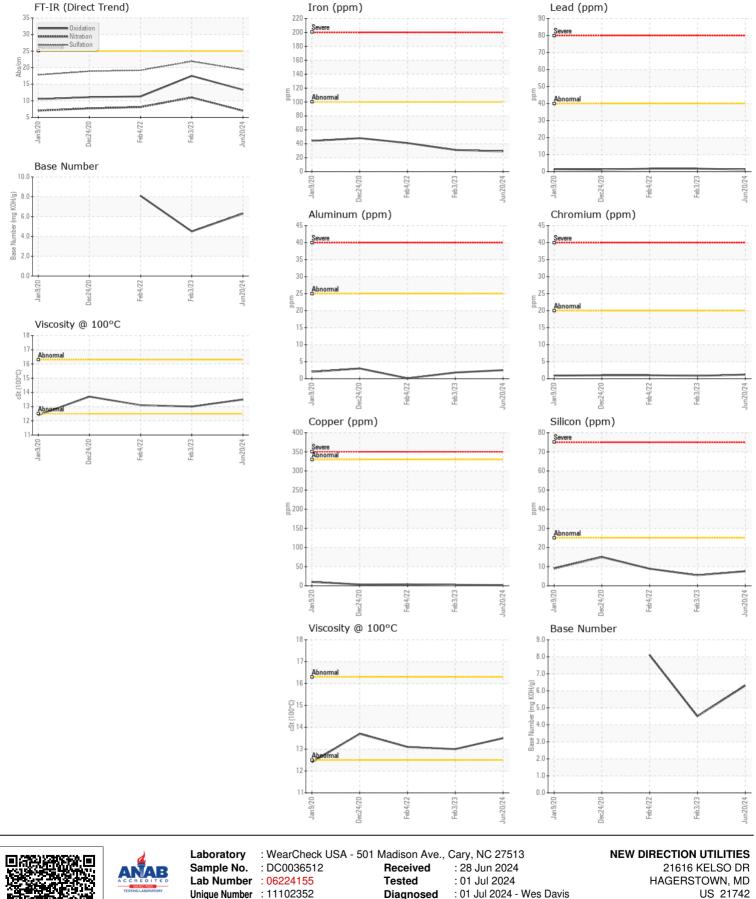
13.1

8.1

13.3

6.3

13.5



Test Package : MOB 1 (Additional Tests: TBN) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. gary@newdirectionutilities.com \* - 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)

Submitted By: GARY BLOYER Page 2 of 2

Contact: GARY BLOYER

T: (301)714-0083

F: