



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**FORD 834-18**  
 Component  
**Gasoline Engine**  
 Fluid  
**DURALENE Dura-Syn DX-1 5W30 (7 QTS)**

## 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>DC0033062</b>	DC0023313	DC0020753
Sample Date		Client Info		<b>19 Apr 2024</b>	15 Dec 2022	20 Sep 2022
Machine Age	mls	Client Info		<b>120577</b>	120577	114245
Oil Age	mls	Client Info		<b>5000</b>	6332	7000
Filter Age	mls	Client Info		<b>5000</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>35</b>	6	6
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>40	<b>7</b>	1	1
Lead	ppm	ASTM D5185m	>50	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>155	<b>35</b>	9	10
Tin	ppm	ASTM D5185m	>10	<b>3</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

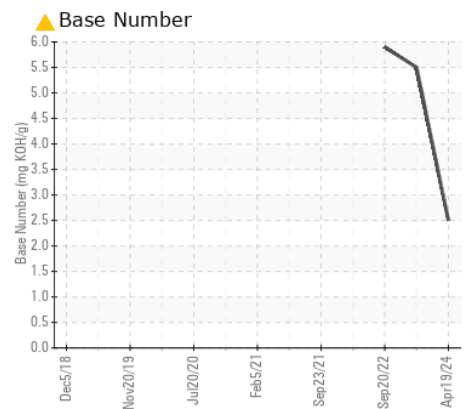
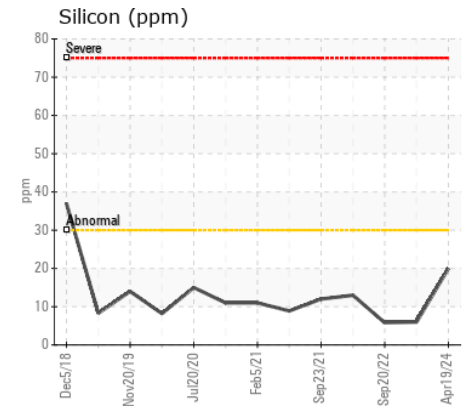
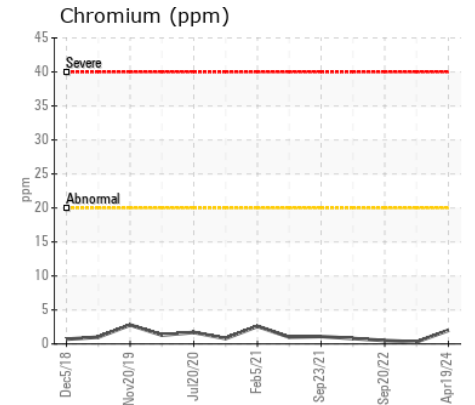
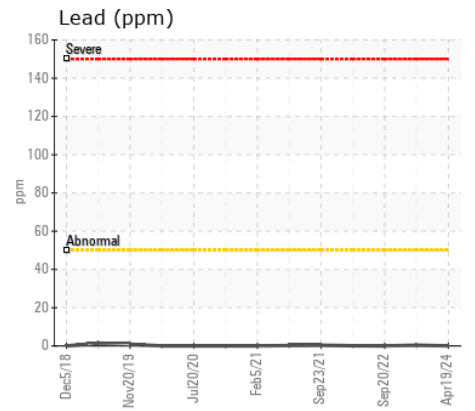
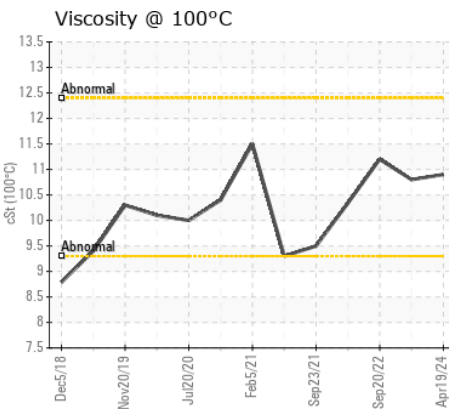
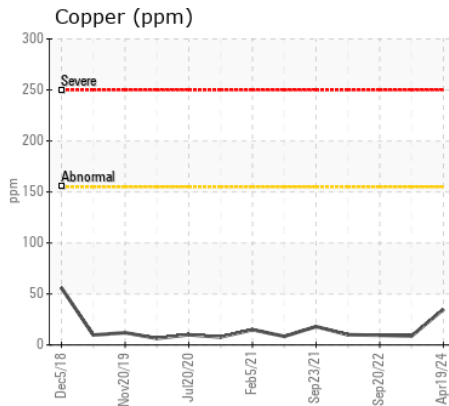
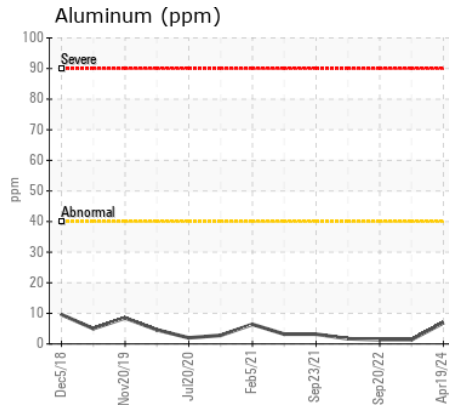
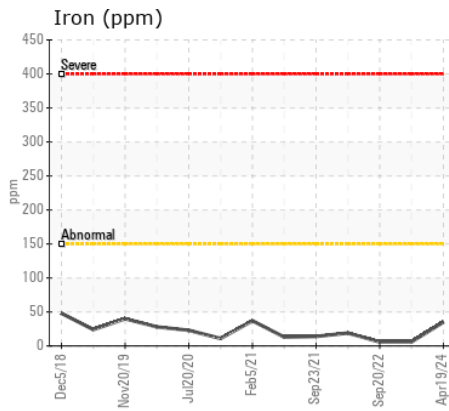
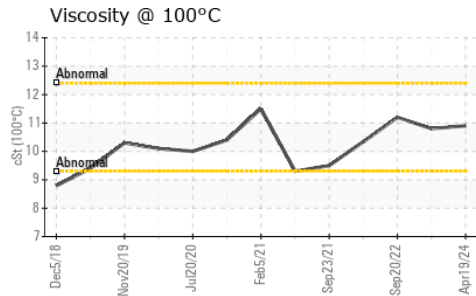
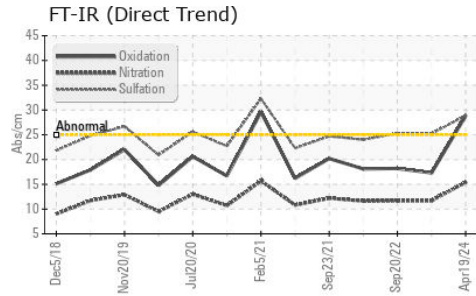
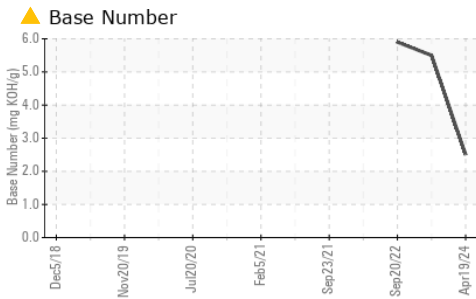
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>20</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	1
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
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>15.4</b>	11.7	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.9</b>	25.2	25.3
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 BN level is low. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>400	<b>12</b>	3	6
Boron	ppm	ASTM D5185m		<b>16</b>	31	24
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>153</b>	63	50
Manganese	ppm	ASTM D5185m		<b>5</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>438</b>	471	373
Calcium	ppm	ASTM D5185m		<b>1139</b>	1363	1440
Phosphorus	ppm	ASTM D5185m		<b>626</b>	667	653
Zinc	ppm	ASTM D5185m		<b>753</b>	791	813
Sulfur	ppm	ASTM D5185m		<b>2101</b>	3408	3223
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>28.8</b>	17.3	18.2
Base Number (BN)	mg KOH/g	ASTM D2896		<b>▲ 2.5</b>	5.5	5.9
Visc @ 100°C	cSt	ASTM D445		<b>10.9</b>	10.8	11.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0033062 **Received** : 28 Jun 2024  
**Lab Number** : 06224153 **Tested** : 02 Jul 2024  
**Unique Number** : 11102350 **Diagnosed** : 02 Jul 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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)

**NEW DIRECTION UTILITIES**  
 21616 KELSO DR  
 HAGERSTOWN, MD  
 US 21742  
 Contact: GARY BLOYER  
 gary@newdirectionutilities.com  
 T: (301)714-0083  
 F: