



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FORD 461-16
 Component
Diesel Engine
 Fluid
DURALENE Dura-Max 15W40 (12 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC06224158	DC0028621	DC0023370
Sample Date		Client Info		21 Jun 2024	15 Aug 2023	16 Nov 2022
Machine Age	mls	Client Info		90466	77652	69856
Oil Age	mls	Client Info		0	7796	4939
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	41	80	61
Chromium	ppm	ASTM D5185m	>20	1	2	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	10	6	5
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	4	7	4
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

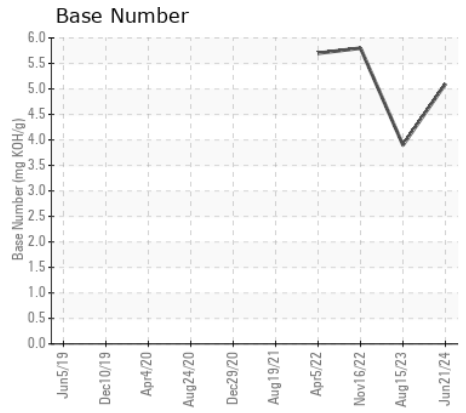
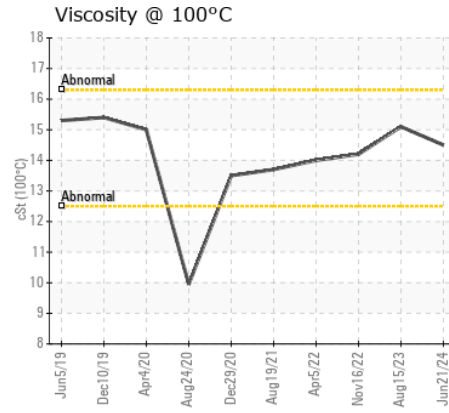
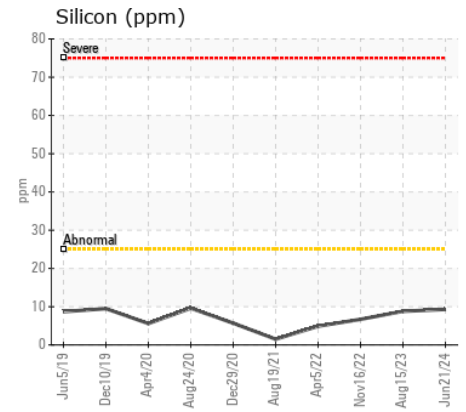
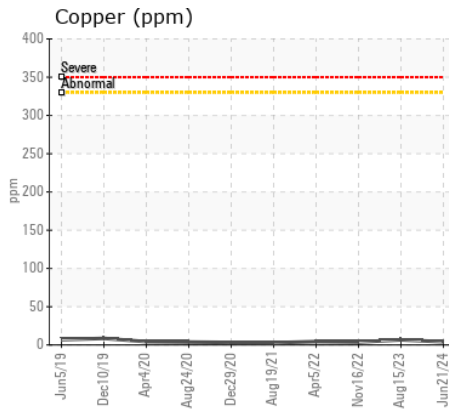
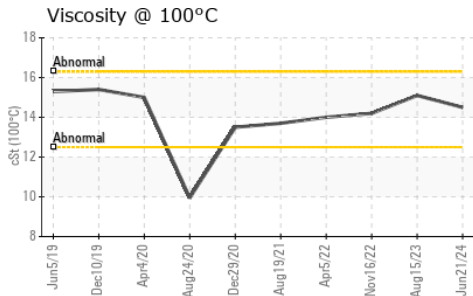
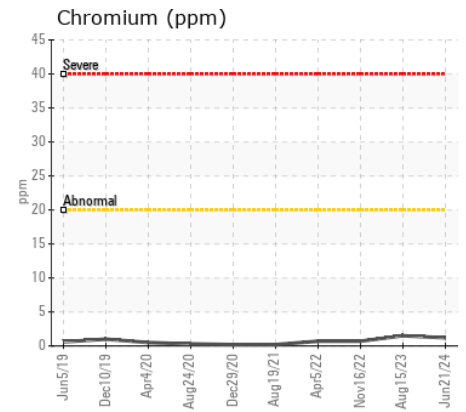
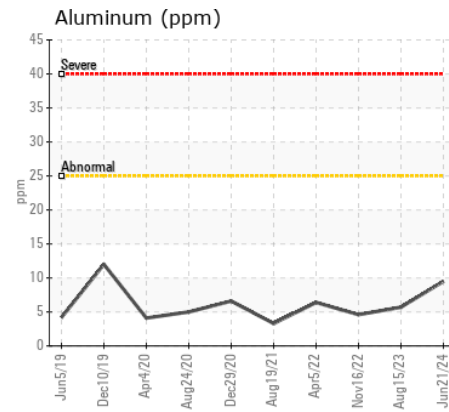
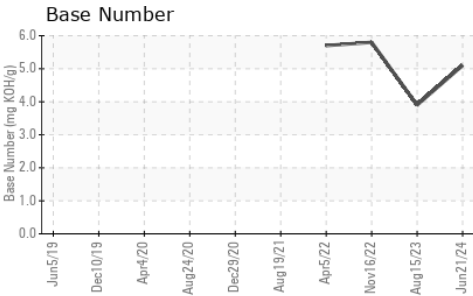
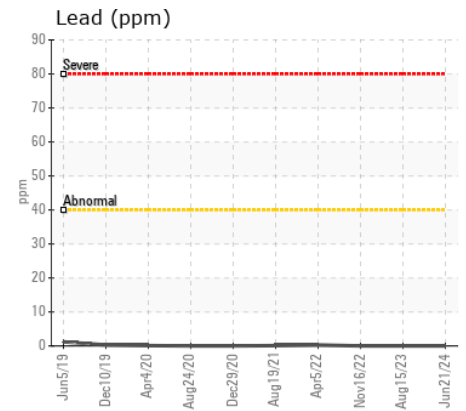
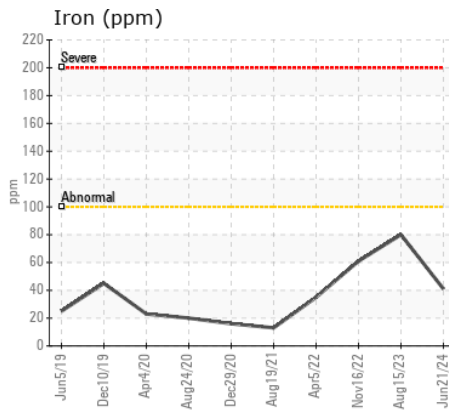
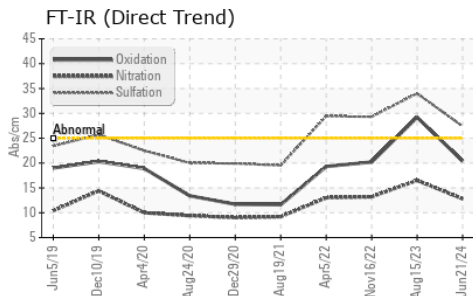
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	9	7
Potassium	ppm	ASTM D5185m	>20	8	2	4
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	0.9	1	0.7
Nitration	Abs/cm	*ASTM D7624	>20	12.8	16.5	13.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.4	34.0	29.3
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		3	3	2
Boron	ppm	ASTM D5185m		9	0	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		10	2	2
Manganese	ppm	ASTM D5185m		<1	1	0
Magnesium	ppm	ASTM D5185m		93	29	35
Calcium	ppm	ASTM D5185m		2361	2431	2462
Phosphorus	ppm	ASTM D5185m		987	897	901
Zinc	ppm	ASTM D5185m		1117	1134	1086
Sulfur	ppm	ASTM D5185m		3603	4121	4104
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	29.2	20.2
Base Number (BN)	mg KOH/g	ASTM D2896		5.1	3.9	5.8
Visc @ 100°C	cSt	ASTM D445		14.5	15.1	14.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC06224158 **Received** : 28 Jun 2024
Lab Number : 06224158 **Tested** : 01 Jul 2024
Unique Number : 11102355 **Diagnosed** : 01 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

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

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)