OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
FORD 873/M-3
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

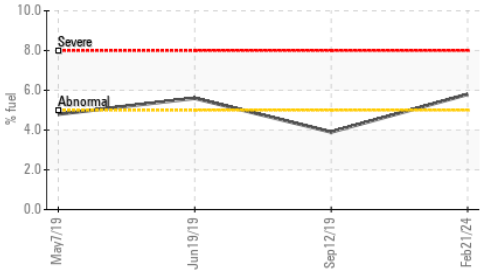
Insufficient sample was received to conduct all the routine laboratory tests. There is a moderate amount of fuel present in the oil.

FLUID CONDITION

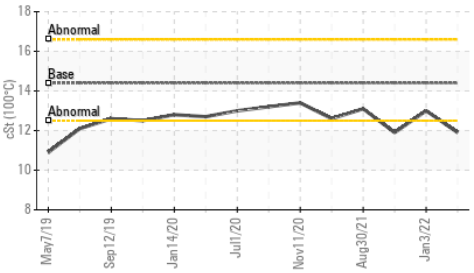
Fuel is present in the oil and is lowering the viscosity.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0868250	WC0646915	WC0631304
Sample Date		Client Info		21 Feb 2024	03 Jan 2022	25 Oct 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	▲ 120	31	69
Chromium	ppm	ASTM D5185m	>20	<1	1	3
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	13	4	7
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	2	1	3
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	12	10	12
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Fuel	%	ASTM D3524	>5	▲ 5.8	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	---	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	---	8.2	13
Sulfation	Abs/.1mm	*ASTM D7415	>30	---	25	28
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
Sodium	ppm	ASTM D5185m	>158	4	1	2
Boron	ppm	ASTM D5185m	250	283	301	187
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	110	121	127
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	450	616	684	703
Calcium	ppm	ASTM D5185m	3000	1463	1589	1582
Phosphorus	ppm	ASTM D5185m	1150	677	731	731
Zinc	ppm	ASTM D5185m	1350	794	823	890
Sulfur	ppm	ASTM D5185m	4250	2343	1907	2085
Oxidation	Abs/.1mm	*ASTM D7414	>25	---	20.6	30.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	---	9.4	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.9	13.0	11.9

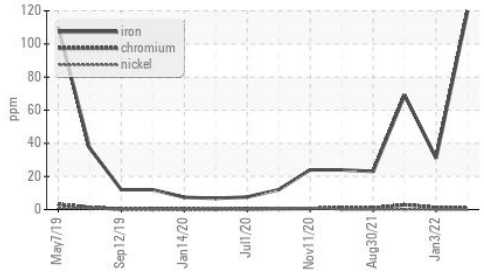
Fuel Dilution



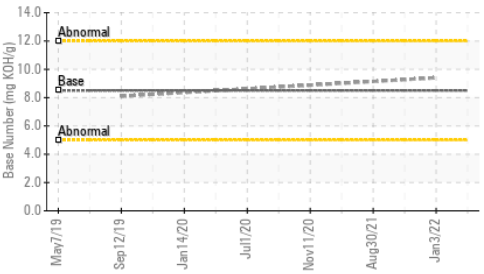
Viscosity @ 100°C



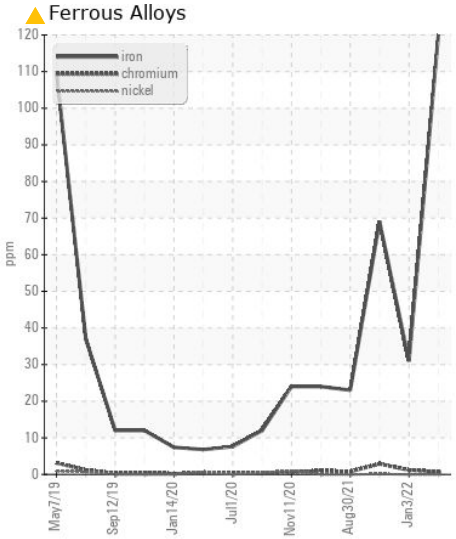
Ferrous Alloys



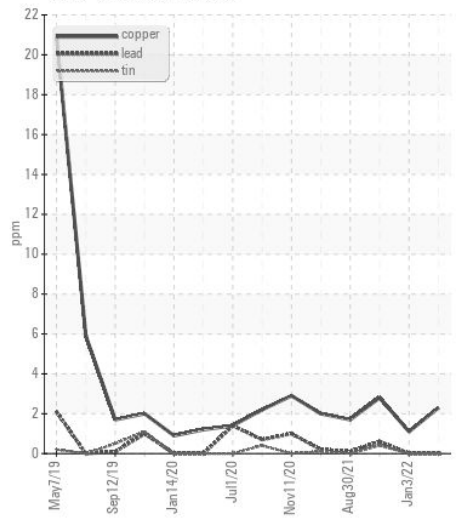
Base Number



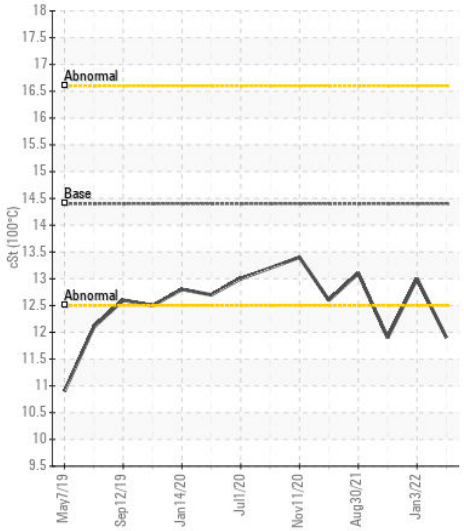
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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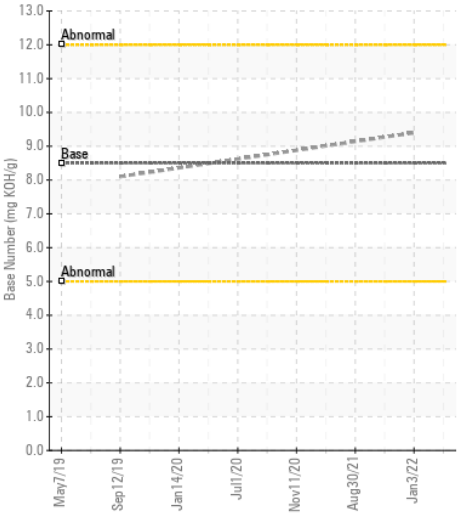

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868250
Lab Number : 06101356
Unique Number : 10899586
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 27 Feb 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 2024 - Jonathan Hester

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)

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