



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FORD 009
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0005283	RW0004579	RW0004502
Sample Date		Client Info		21 Jun 2024	27 Oct 2023	16 Aug 2023
Machine Age	mls	Client Info		18052	11084	5762
Oil Age	mls	Client Info		7986	5322	5762
Filter Age	mls	Client Info		7986	5322	5762
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	MARGINAL	ATTENTION

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	40	23	61
Chromium	ppm	ASTM D5185m	>20	2	2	4
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	1	2	13
Aluminum	ppm	ASTM D5185m	>25	3	2	12
Lead	ppm	ASTM D5185m	>40	<1	0	1
Copper	ppm	ASTM D5185m	>330	5	8	43
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

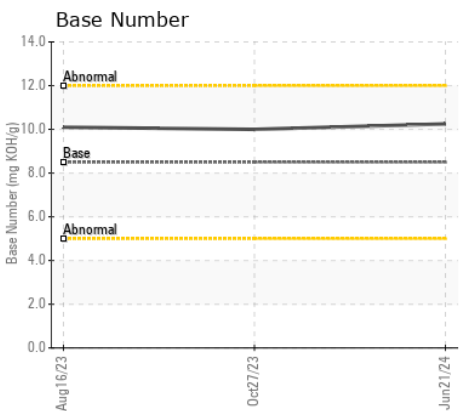
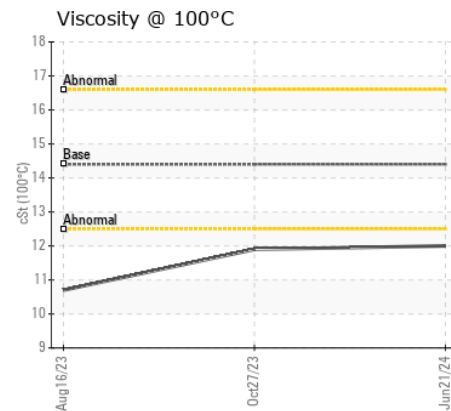
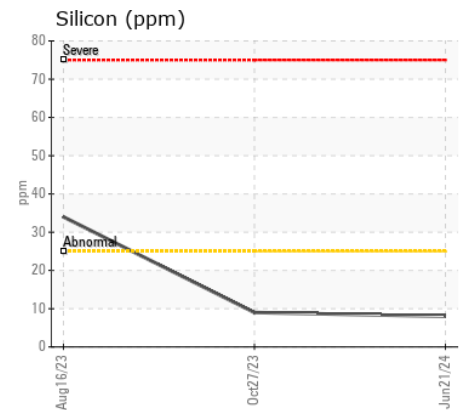
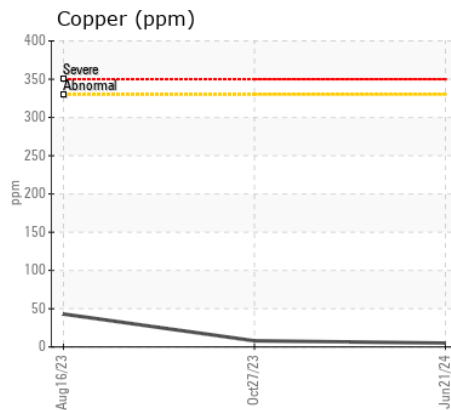
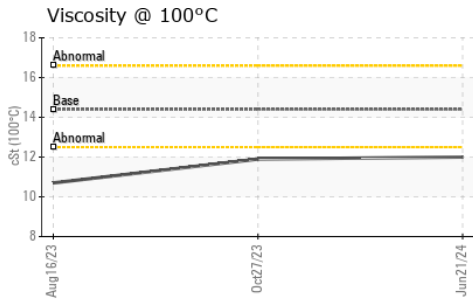
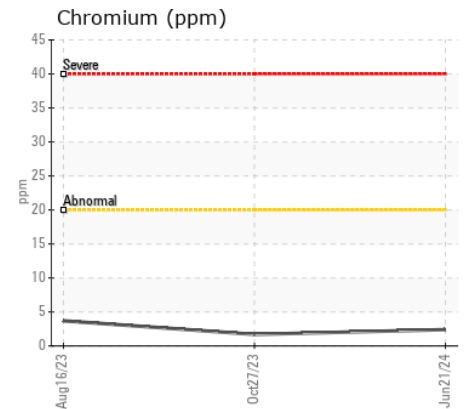
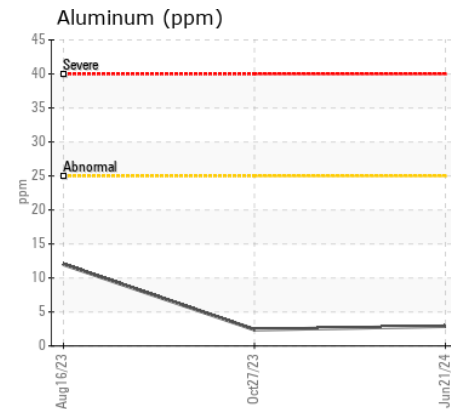
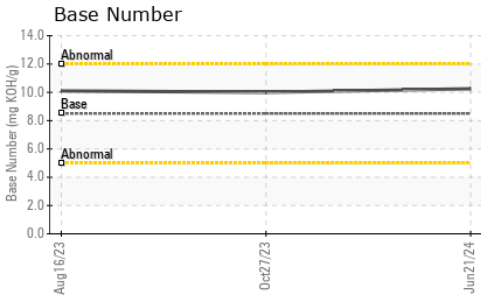
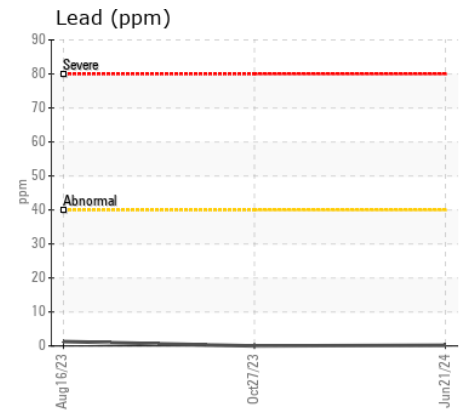
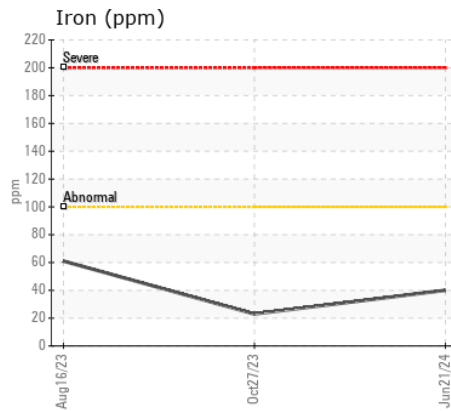
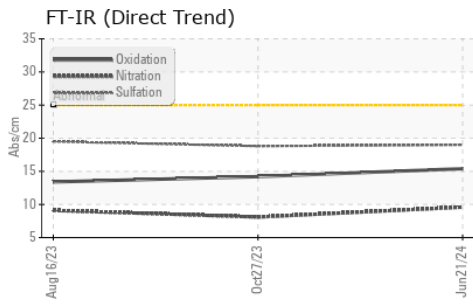
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	9	34
Potassium	ppm	ASTM D5185m	>20	2	0	8
Fuel		WC Method	>5	<1.0	▲ 3.3	▲ 3.7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.6	8.1	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	18.8	19.5
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	>158	0	1	9
Boron	ppm	ASTM D5185m	250	6	11	63
Barium	ppm	ASTM D5185m	10	0	0	4
Molybdenum	ppm	ASTM D5185m	100	71	51	<1
Manganese	ppm	ASTM D5185m		1	2	5
Magnesium	ppm	ASTM D5185m	450	999	855	821
Calcium	ppm	ASTM D5185m	3000	1265	1071	1434
Phosphorus	ppm	ASTM D5185m	1150	1055	991	1174
Zinc	ppm	ASTM D5185m	1350	1358	1196	1372
Sulfur	ppm	ASTM D5185m	4250	3184	2933	4890
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.4	14.2	13.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	10.25	10.00	10.10
Visc @ 100°C	cSt	ASTM D445	14.4	12.0	11.9	● 10.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0005283
Lab Number : 06229285
Unique Number : 11112778
Test Package : MOB 2

Received : 05 Jul 2024
Tested : 08 Jul 2024
Diagnosed : 08 Jul 2024 - Wes Davis

HALLACK CONTRACTING, INC.
 4223 W POLK
 HART, MI
 US 49420

Contact: DAN HALLACK KARL BUTCHER
 shop@hallackcontracting.com

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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