CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Area
5C07
Machine Id
FORD F-550 TVK6115 (S/N 1FDUF5GTXHEE73590)
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

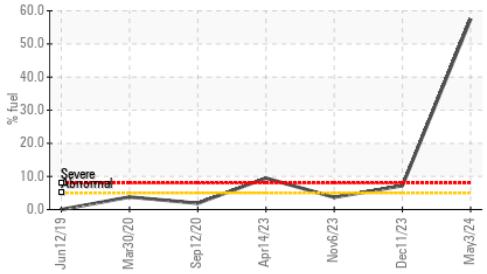
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

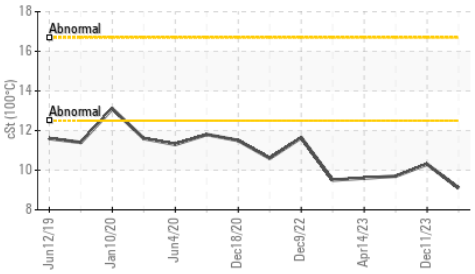
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ARI0007537	ARI0006919	ARI0006826
Sample Date		Client Info		03 May 2024	11 Dec 2023	06 Nov 2023
Machine Age	mls	Client Info		70706	67863	66868
Oil Age	mls	Client Info		0	995	6559
Filter Age	mls	Client Info		0	995	6559
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	28	10	6
Chromium	ppm	ASTM D5185m	>20	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	2	1	<1
Aluminum	ppm	ASTM D5185m	>25	5	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	2	1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	8	8	9
Potassium	ppm	ASTM D5185m	>20	3	4	3
Fuel	%	ASTM D3524	>5	▲ 57.5	▲ 7.2	▲ 3.7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	11.0	9.6	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	19.3	18.1
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		1	<1	3
Boron	ppm	ASTM D5185m		43	80	94
Barium	ppm	ASTM D5185m		<1	11	0
Molybdenum	ppm	ASTM D5185m		7	27	54
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		530	591	557
Calcium	ppm	ASTM D5185m		1028	1158	1158
Phosphorus	ppm	ASTM D5185m		824	636	● 665
Zinc	ppm	ASTM D5185m		897	761	● 771
Sulfur	ppm	ASTM D5185m		3076	2944	2730
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.1	16.5	12.9
Base Number (BN)	mg KOH/g	ASTM D2896		5.2	5.8	7.1
Visc @ 100°C	cSt	ASTM D445		▲ 9.1	▲ 10.3	▲ 9.7

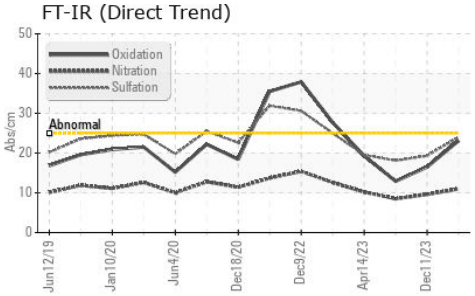
Fuel Dilution



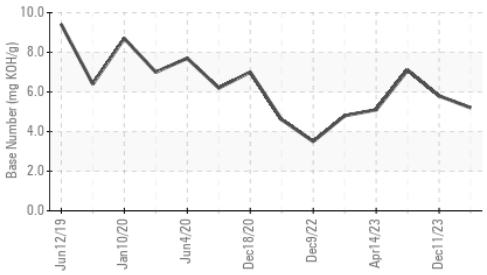
Viscosity @ 100°C



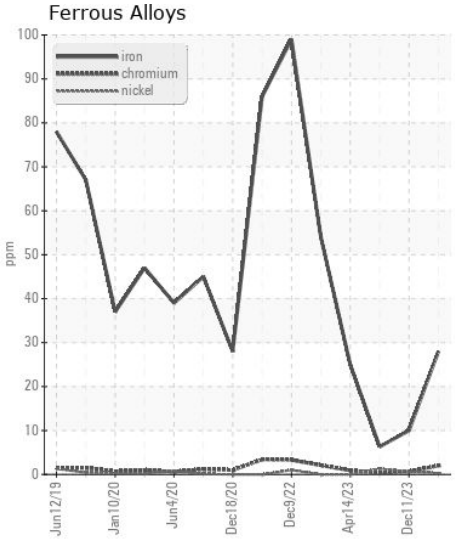
FT-IR (Direct Trend)



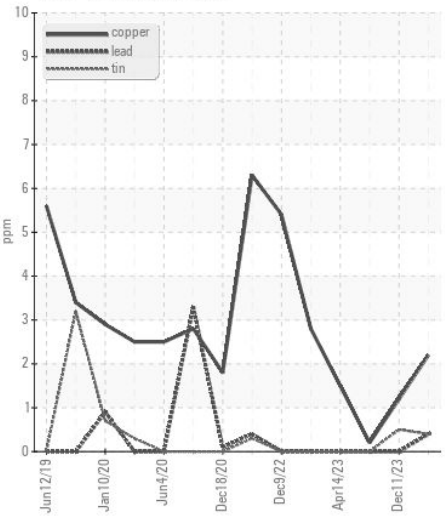
Base Number



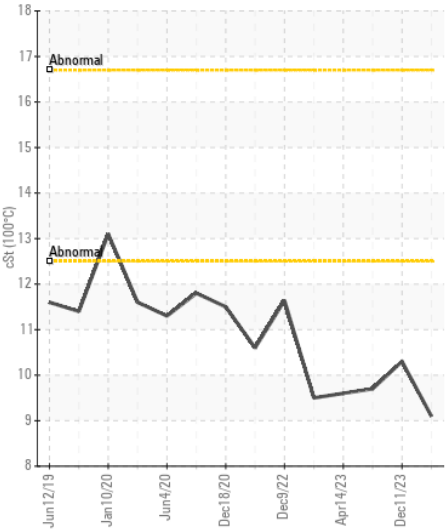
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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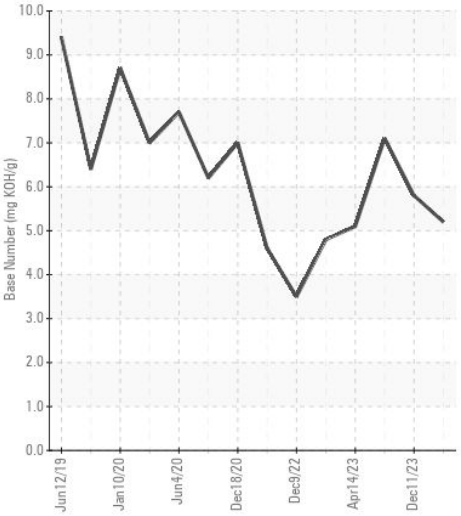

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ARI0007537
Lab Number : 06187403
Unique Number : 11044155
Test Package : CONST (Additional Tests: PercentFuel, TBN)

Received : 22 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Wes Davis

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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