FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
(62A0X0D) TALLASSEE
Machine Id
425027-345507
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- LTR)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

Aluminum ppm levels are abnormal. Piston wear is indicated.

CONTAMINATION

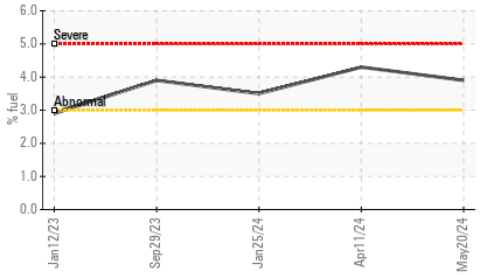
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

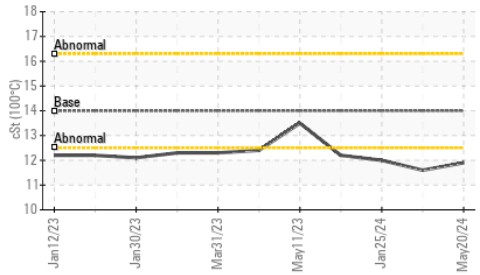
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0088605	GFL0080699	GFL0081857
Sample Date		Client Info		20 May 2024	11 Apr 2024	25 Jan 2024
Machine Age	hrs	Client Info		13106	17874	17584
Oil Age	hrs	Client Info		13106	1305	1015
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>120	38	29	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 24	▲ 22	15
Lead	ppm	ASTM D5185m	>40	1	<1	<1
Copper	ppm	ASTM D5185m	>330	7	6	4
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	13	11	10
Potassium	ppm	ASTM D5185m	>20	1	21	4
Fuel	%	ASTM D3524	>3.0	▲ 3.9	▲ 4.3	▲ 3.5
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	1.4	1.3	1
Nitration	Abs/cm	*ASTM D7624	>20	12.3	12.2	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.4	24.5	21.9
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		7	9	4
Boron	ppm	ASTM D5185m	0	4	1	3
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	68	61	62
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	0	834	735	794
Calcium	ppm	ASTM D5185m		1104	1071	1048
Phosphorus	ppm	ASTM D5185m		897	787	837
Zinc	ppm	ASTM D5185m		1111	1003	1109
Sulfur	ppm	ASTM D5185m		2969	2849	2843
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	18.0	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	5.4	4.2	4.8
Visc @ 100°C	cSt	ASTM D445	14	▲ 11.9	▲ 11.6	▲ 12.0

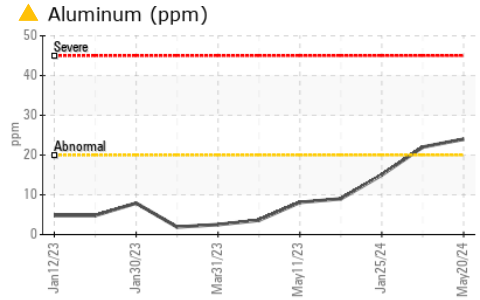
Fuel Dilution



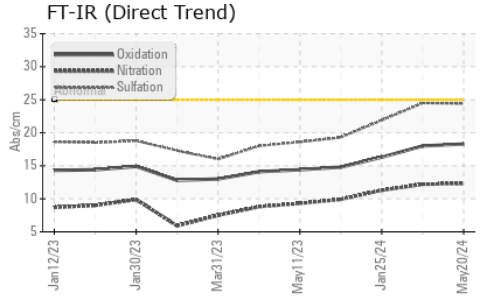
Viscosity @ 100°C



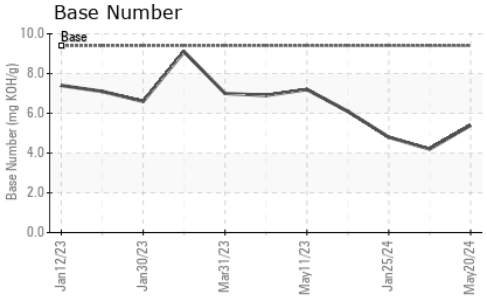
Aluminum (ppm)



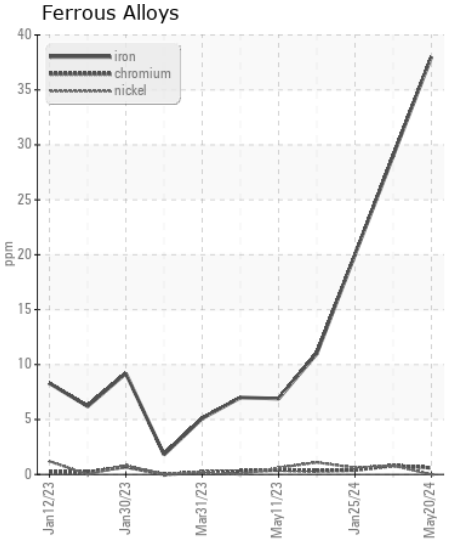
FT-IR (Direct Trend)



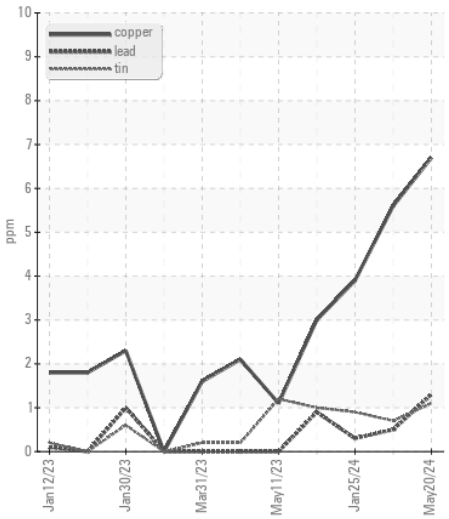
Base Number



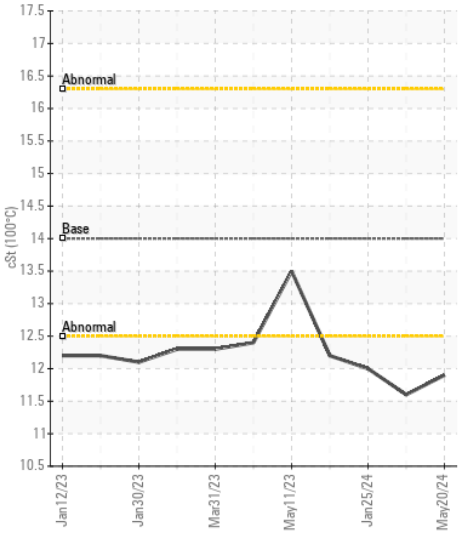
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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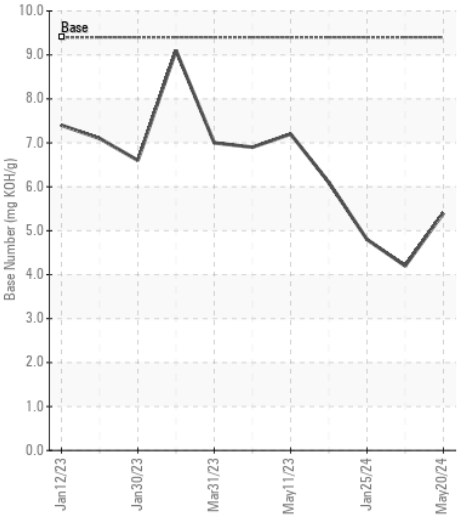

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0088605
Lab Number : 06187175
Unique Number : 11043927
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 21 May 2024
Tested : 24 May 2024
Diagnosed : 24 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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