OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
91089
Component
Diesel Engine
Fluid
AG 10W30 FLEET (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

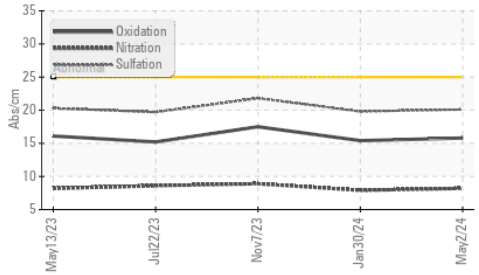
There is no indication of any contamination in the oil.

FLUID CONDITION

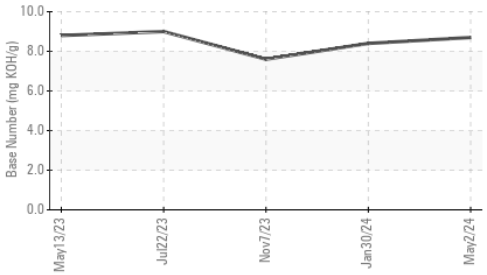
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0004990	SBP0004984	SBP0004617
Sample Date		Client Info		02 May 2024	30 Jan 2024	07 Nov 2023
Machine Age	mls	Client Info		20000	0	28500
Oil Age	mls	Client Info		20000	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>80	11	8	12
Chromium	ppm	ASTM D5185m	>5	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	4	5	4
Lead	ppm	ASTM D5185m	>30	2	0	1
Copper	ppm	ASTM D5185m	>150	8	3	5
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	4	4	4
Potassium	ppm	ASTM D5185m	>20	4	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	0.5	0.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	8.2	7.9	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	19.8	21.8
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		0	2	1
Boron	ppm	ASTM D5185m		5	4	<1
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		65	58	62
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		941	994	994
Calcium	ppm	ASTM D5185m		1133	1054	1094
Phosphorus	ppm	ASTM D5185m		1089	1074	1024
Zinc	ppm	ASTM D5185m		1231	1322	1356
Sulfur	ppm	ASTM D5185m		3170	3102	2869
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	15.4	17.5
Base Number (BN)	mg KOH/g	ASTM D2896		8.7	8.4	7.6
Visc @ 100°C	cSt	ASTM D445		12.0	12.5	11.6

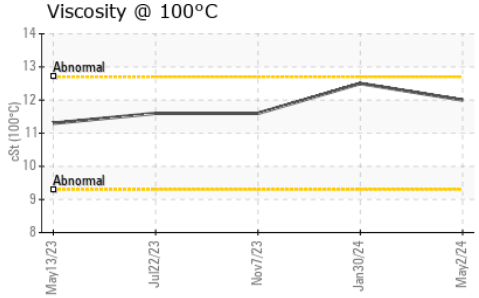
FT-IR (Direct Trend)



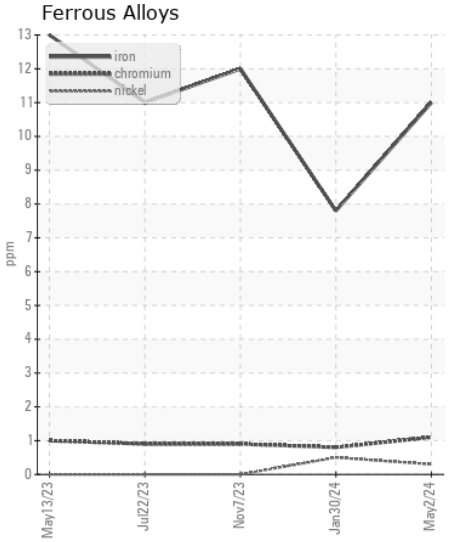
Base Number



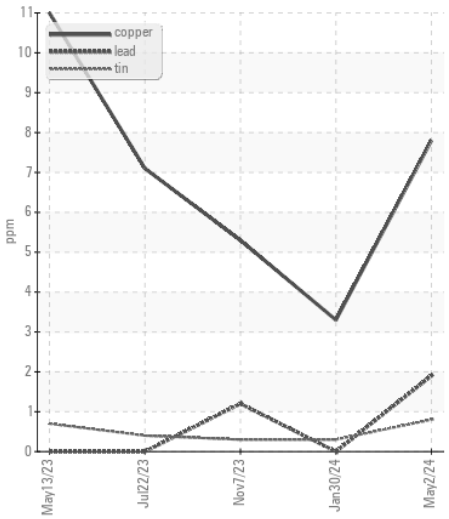
Viscosity @ 100°C



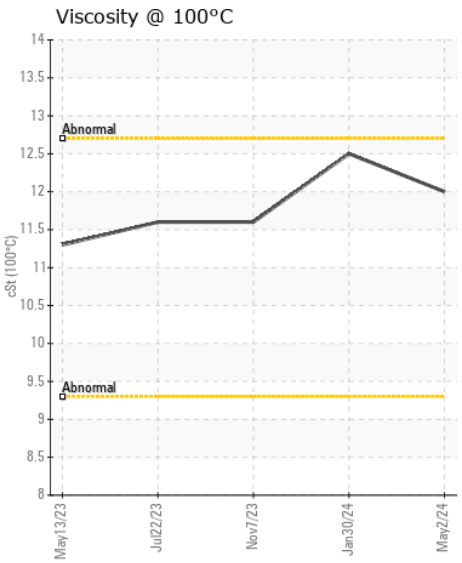
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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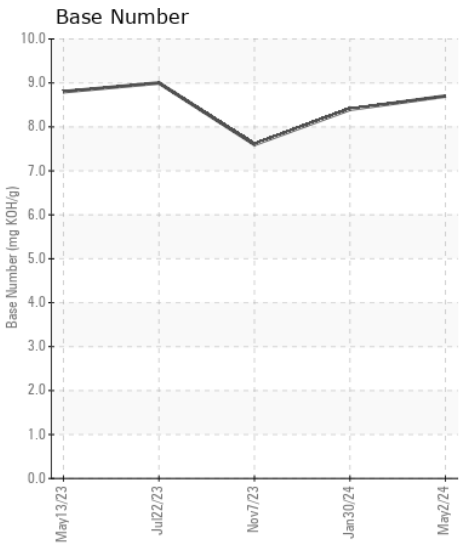

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0004990
Lab Number : 06176601
Unique Number : 11022654
Test Package : FLEET

Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Wes Davis

Sapp Bros. Fleet - York Location
PO Box 249
York, NE
US 68467
Contact: Service Manager

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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