



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
91098
Component
Diesel Engine
Fluid
AG 10W30 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0004989	SBP0004985	SBP0004618
Sample Date		Client Info		13 Jun 2024	11 Mar 2024	07 Nov 2023
Machine Age	mls	Client Info		23330	0	20500
Oil Age	mls	Client Info		0	20000	0
Filter Age	mls	Client Info		0	20000	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

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>80	9	9	11
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	4	3	4
Lead	ppm	ASTM D5185m	>30	2	0	<1
Copper	ppm	ASTM D5185m	>150	15	19	27
Tin	ppm	ASTM D5185m	>5	1	1	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

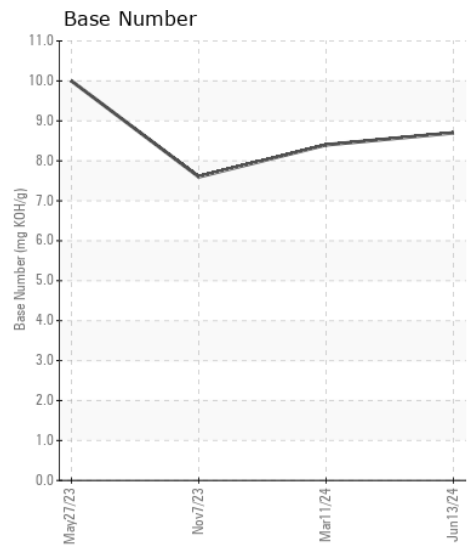
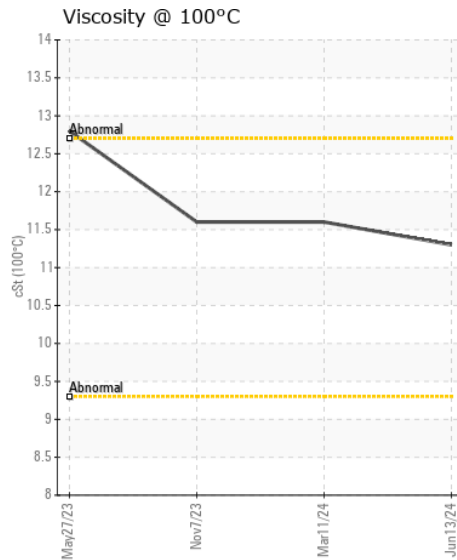
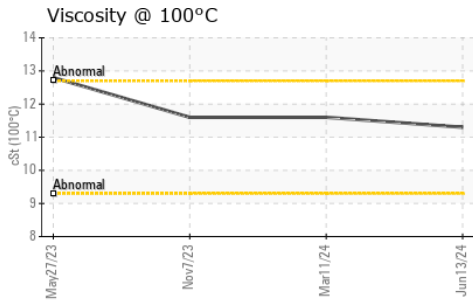
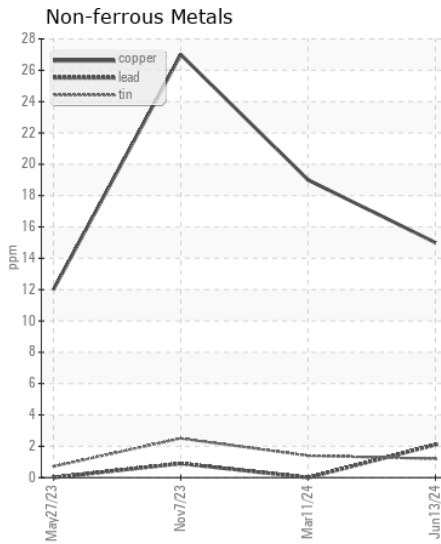
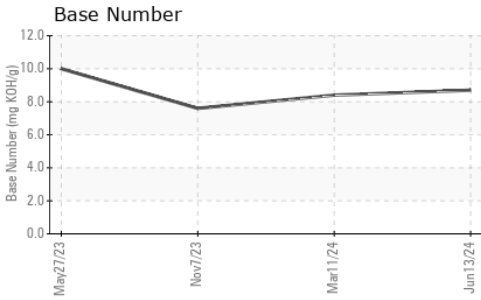
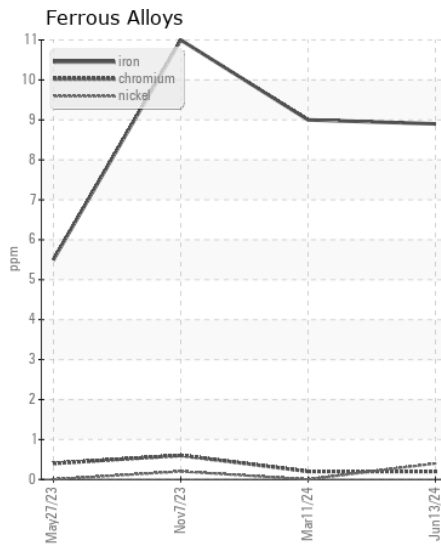
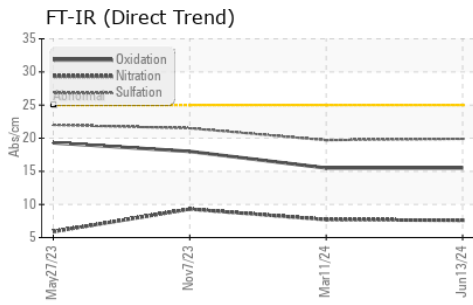
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	3	5
Potassium	ppm	ASTM D5185m	>20	5	1	8
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	0.4	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.6	7.7	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	19.7	21.5
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		2	2	2
Boron	ppm	ASTM D5185m		8	4	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		63	55	59
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		1025	900	940
Calcium	ppm	ASTM D5185m		1141	1056	1228
Phosphorus	ppm	ASTM D5185m		1117	988	1031
Zinc	ppm	ASTM D5185m		1364	1203	1294
Sulfur	ppm	ASTM D5185m		3583	2933	2891
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	15.5	18.0
Base Number (BN)	mg KOH/g	ASTM D2896		8.7	8.4	7.6
Visc @ 100°C	cSt	ASTM D445		11.3	11.6	11.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0004989 **Received** : 21 Jun 2024
Lab Number : 06217511 **Tested** : 24 Jun 2024
Unique Number : 11090375 **Diagnosed** : 24 Jun 2024 - Wes Davis
Test Package : FLEET

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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