



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION



Machine Id
93041
Component
Diesel Engine
Fluid
AMERIGUARD 15W40 (10 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0005888	SBP0005915	SBP0005576
Sample Date		Client Info		09 May 2024	26 Jan 2024	30 Oct 2023
Machine Age	mls	Client Info		321700	320238	317340
Oil Age	mls	Client Info		1447	2808	10820
Filter Age	mls	Client Info		1447	2808	10820
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	15	41	▲ 108
Chromium	ppm	ASTM D5185m	>5	1	3	▲ 16
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	1	1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	2	6	▲ 16
Lead	ppm	ASTM D5185m	>30	2	1	9
Copper	ppm	ASTM D5185m	>150	67	23	6
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

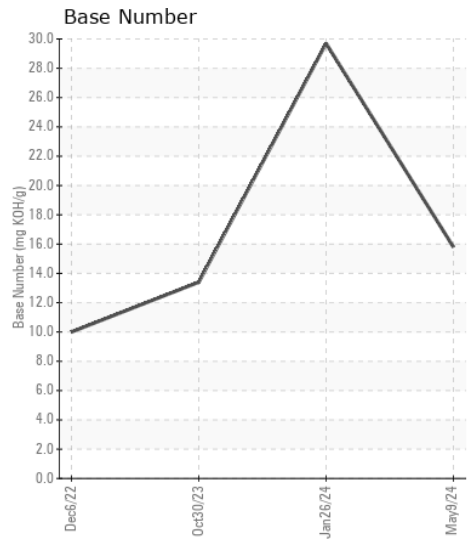
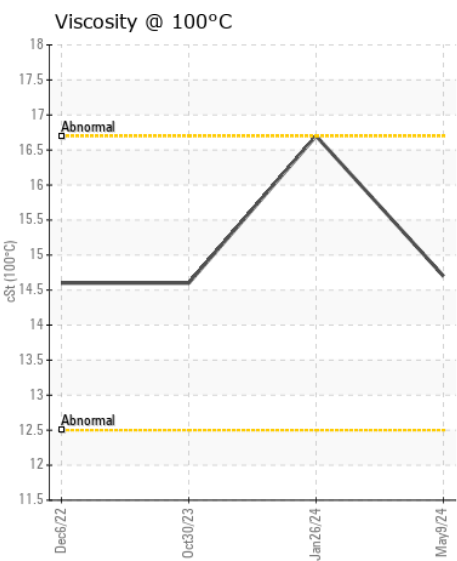
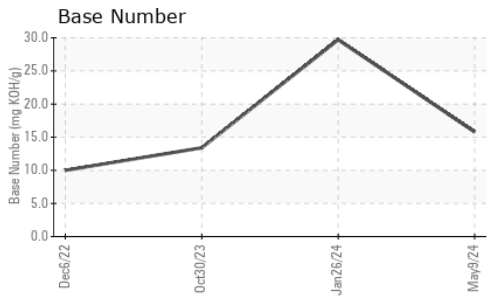
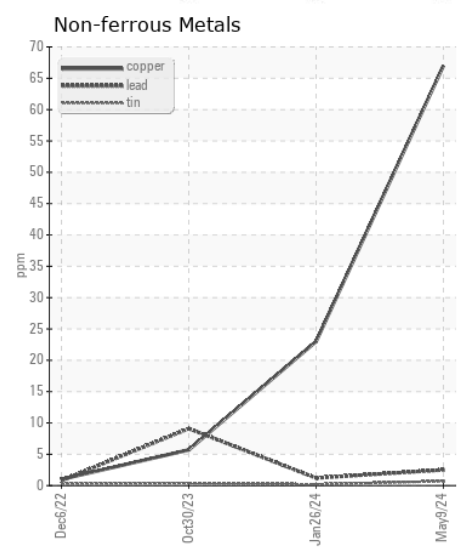
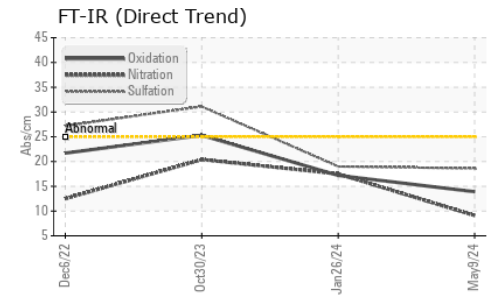
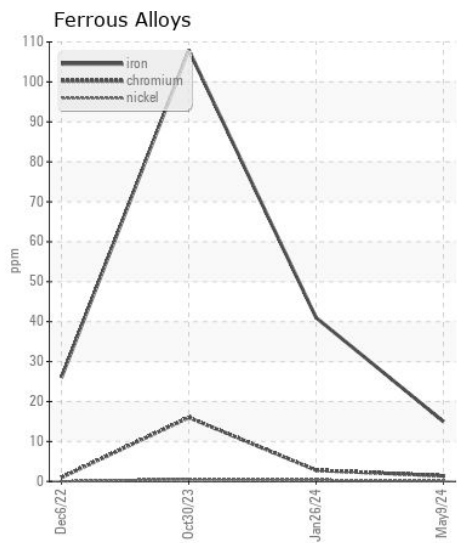
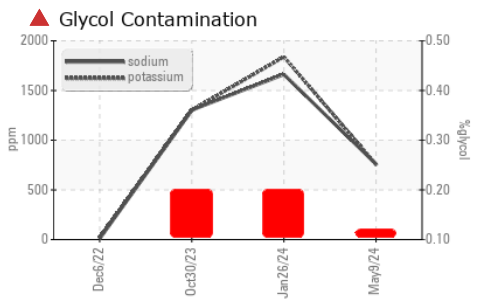
Test for glycol is positive. There is a high concentration of glycol present in the oil.

Silicon	ppm	ASTM D5185m	>20	9	9	14
Potassium	ppm	ASTM D5185m	>20	▲ 756	▲ 1839	▲ 1302
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.12	▲ 0.20	▲ 0.20
Soot %	%	*ASTM D7844	>3	0.2	0.6	▲ 3.3
Nitration	Abs/cm	*ASTM D7624	>20	9.1	17.5	20.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	19.0	31.1
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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		● 759	● 1662	● 1303
Boron	ppm	ASTM D5185m		0	27	11
Barium	ppm	ASTM D5185m		<1	0	<1
Molybdenum	ppm	ASTM D5185m		107	165	141
Manganese	ppm	ASTM D5185m		<1	0	1
Magnesium	ppm	ASTM D5185m		934	744	868
Calcium	ppm	ASTM D5185m		1165	907	1188
Phosphorus	ppm	ASTM D5185m		1111	877	886
Zinc	ppm	ASTM D5185m		1302	1031	1232
Sulfur	ppm	ASTM D5185m		3936	2654	3015
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	17.2	25.3
Base Number (BN)	mg KOH/g	ASTM D2896		15.8	29.7	13.4
Visc @ 100°C	cSt	ASTM D445		14.7	16.7	14.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0005888
Lab Number : 06195043
Unique Number : 11057166
Test Package : FLEET
Received : 30 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Wes Davis

Sapp Bros. Fleet - Julesburg Location
 US
 Contact: Service Manager

Certificate L2367
 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)