



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
95047
Component
Diesel Engine
Fluid
AMERIGUARD 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0001591	SBP0005537	SBP0004656
Sample Date		Client Info		29 Mar 2024	28 Dec 2023	16 Aug 2023
Machine Age	mls	Client Info		209161	201995	194220
Oil Age	mls	Client Info		7166	7775	10292
Filter Age	mls	Client Info		7166	7775	10292
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	12	18	36
Chromium	ppm	ASTM D5185m	>5	<1	<1	2
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	4	3	11
Lead	ppm	ASTM D5185m	>30	0	<1	<1
Copper	ppm	ASTM D5185m	>150	1	<1	2
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

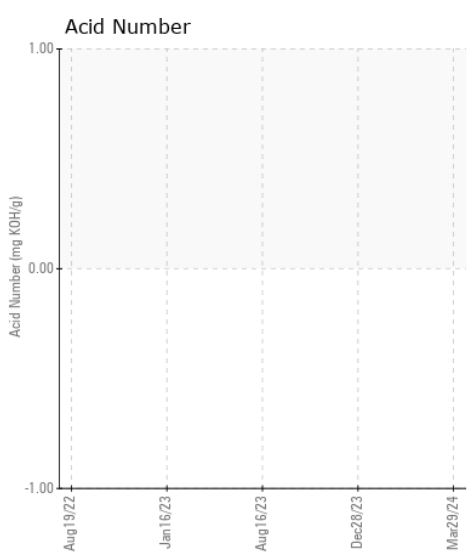
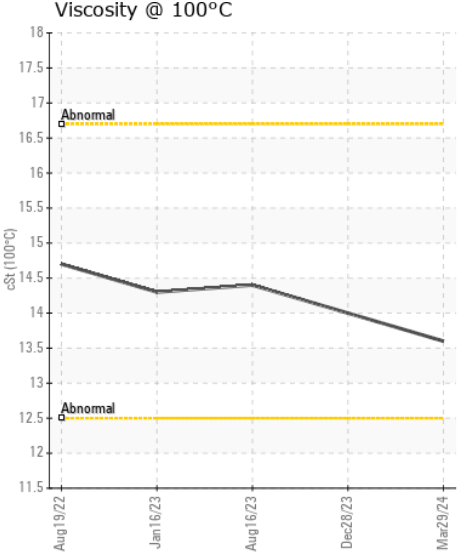
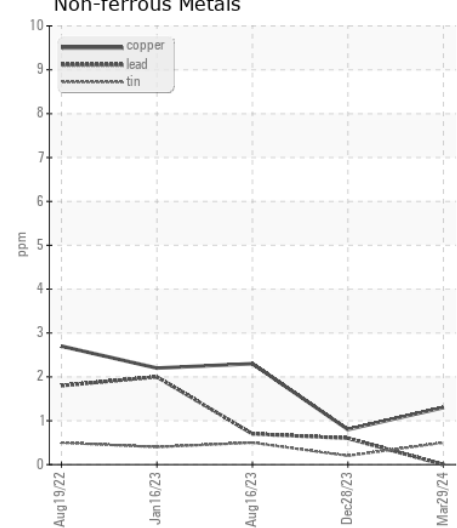
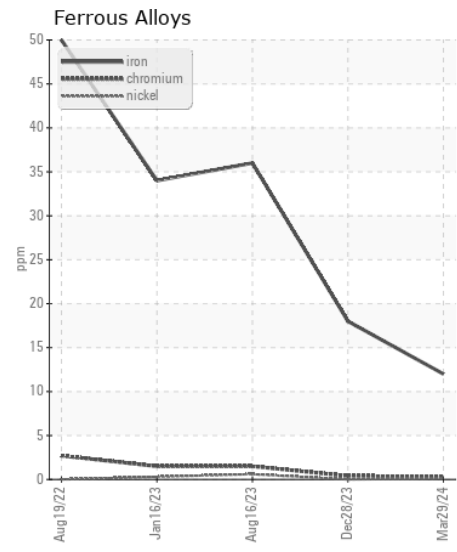
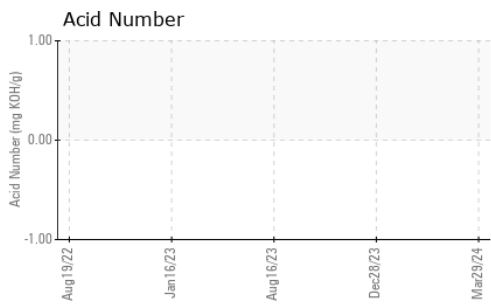
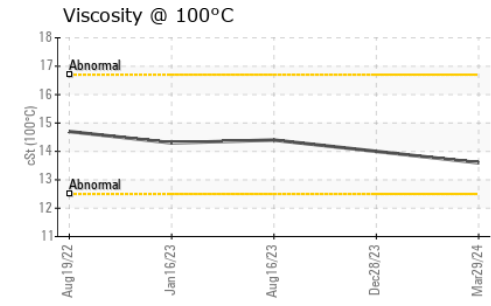
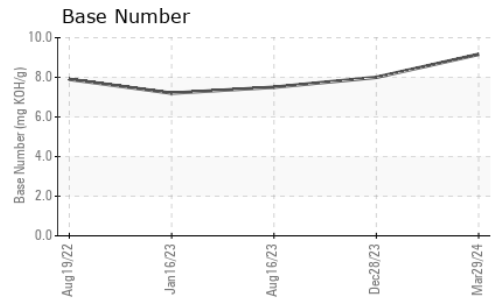
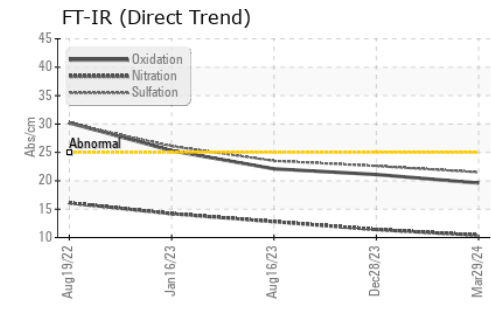
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	5	8
Potassium	ppm	ASTM D5185m	>20	4	4	12
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water	%	ASTM D6304	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.6	0.8
Nitration	Abs/cm	*ASTM D7624	>20	10.4	11.4	12.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	22.6	23.5
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		5	5	10
Boron	ppm	ASTM D5185m		2	0	7
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		63	66	70
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		1018	1136	1125
Calcium	ppm	ASTM D5185m		1129	1200	1260
Phosphorus	ppm	ASTM D5185m		1150	1146	1230
Zinc	ppm	ASTM D5185m		1371	1452	1514
Sulfur	ppm	ASTM D5185m		3741	3364	3478
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	21.1	22.1
Base Number (BN)	mg KOH/g	ASTM D2896		9.16	8.0	7.5
Visc @ 100°C	cSt	ASTM D445		13.6	14.0	14.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0001591 **Received** : 17 Apr 2024
Lab Number : 06152185 **Tested** : 22 Apr 2024
Unique Number : 10982263 **Diagnosed** : 22 Apr 2024 - Don Baldrige
Test Package : PLANT (Additional Tests: FT-IR, KV100, TBN)

Sapp Bros. Fleet - Sidney Location
 US
 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)