



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
95038
 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		SBP0001590	SBP0005520	SBP0001668
Sample Date		Client Info		21 Mar 2024	05 Oct 2023	30 Aug 2022
Machine Age	mls	Client Info		289486	282594	271482
Oil Age	mls	Client Info		6892	11112	13877
Filter Age	mls	Client Info		6892	11112	13877
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	>100	19	47	65
Chromium	ppm	ASTM D5185m	>20	<1	1	3
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	3	4	5
Lead	ppm	ASTM D5185m	>40	<1	<1	2
Copper	ppm	ASTM D5185m	>330	2	2	4
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

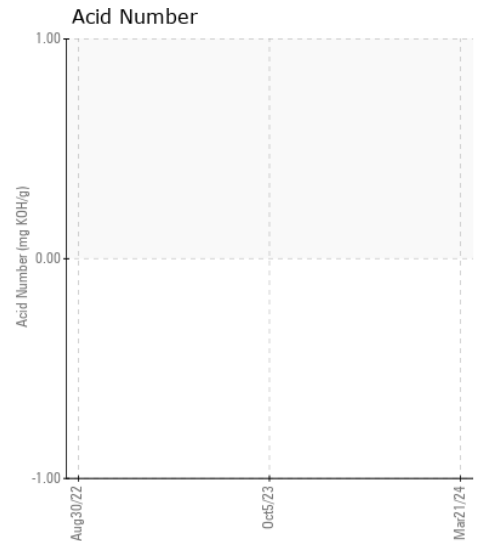
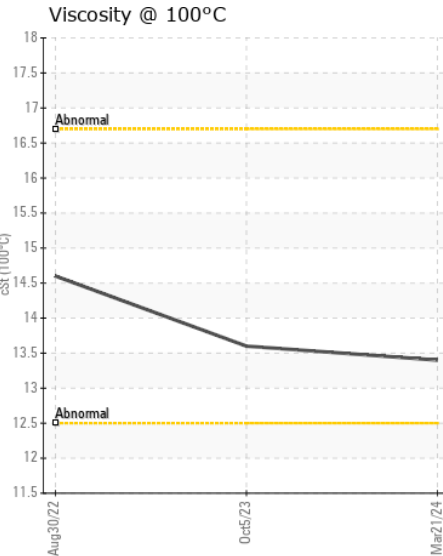
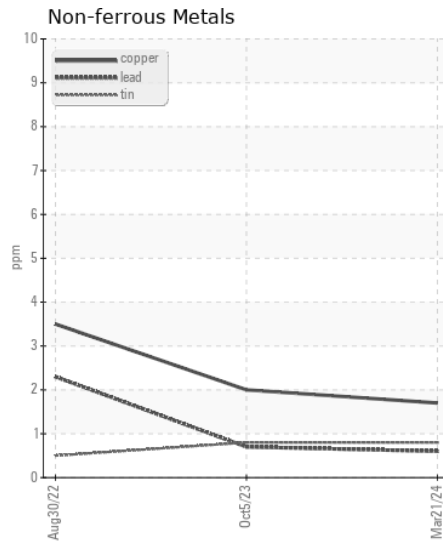
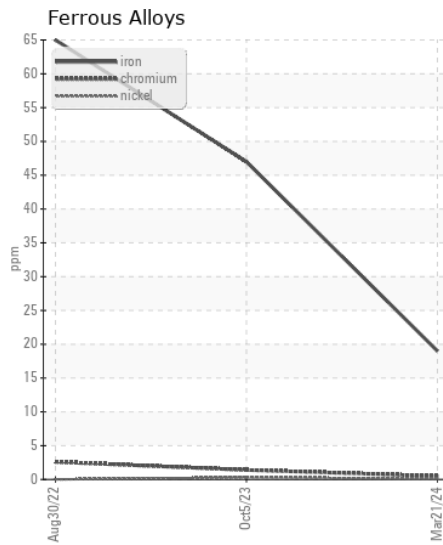
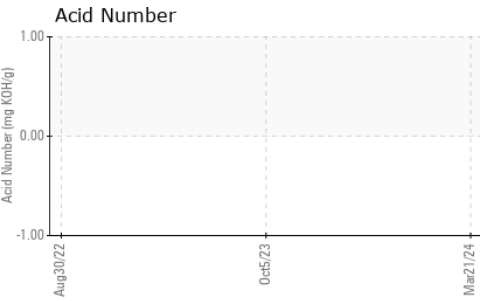
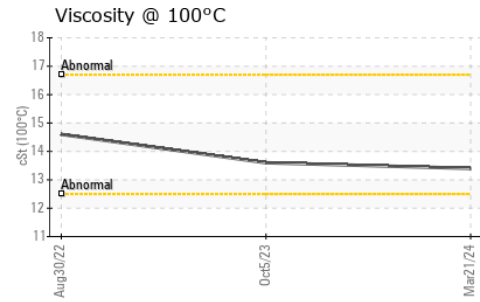
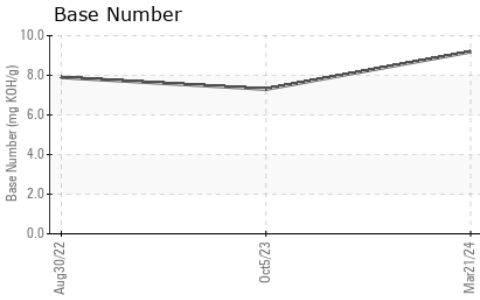
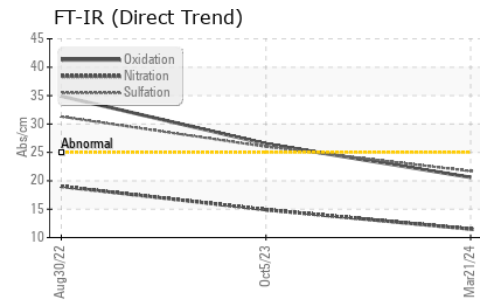
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	5	9
Potassium	ppm	ASTM D5185m	>20	5	6	6
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	0.8	1.2	1.7
Nitration	Abs/cm	*ASTM D7624	>20	11.5	14.9	19.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	26.0	31.3
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	6	7
Boron	ppm	ASTM D5185m		2	5	29
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		71	61	34
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		986	964	624
Calcium	ppm	ASTM D5185m		1151	1162	1589
Phosphorus	ppm	ASTM D5185m		1163	1075	783
Zinc	ppm	ASTM D5185m		1335	1304	963
Sulfur	ppm	ASTM D5185m		3729	2969	2958
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6	26.5	34.9
Base Number (BN)	mg KOH/g	ASTM D2896		9.19	7.3	7.9
Visc @ 100°C	cSt	ASTM D445		13.4	13.6	14.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : SBP0001590

Lab Number : 06152184

Unique Number : 10982262

Test Package : PLANT (Additional Tests: FT-IR, KV100, TBN)

Received : 17 Apr 2024

Tested : 22 Apr 2024

Diagnosed : 22 Apr 2024 - Don Baldrige

Sapp Bros. Fleet - North Platte 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)

T:

F: