



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
{UNASSIGNED}

Machine Id
1111

Component
Diesel Engine

Fluid
AMERIGUARD 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0001605	SBP0005916	SBP0005575
Sample Date		Client Info		20 Jun 2024	26 Jan 2024	20 Oct 2023
Machine Age	mls	Client Info		103181	80223	60057
Oil Age	mls	Client Info		22958	20166	19852
Filter Age	mls	Client Info		22958	20166	19852
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	18	18	17
Chromium	ppm	ASTM D5185m	>20	2	2	2
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	6	12	20
Lead	ppm	ASTM D5185m	>40	<1	0	2
Copper	ppm	ASTM D5185m	>330	15	43	114
Tin	ppm	ASTM D5185m	>15	<1	0	<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

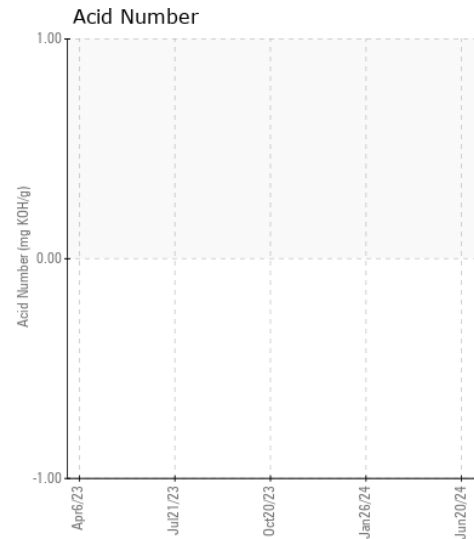
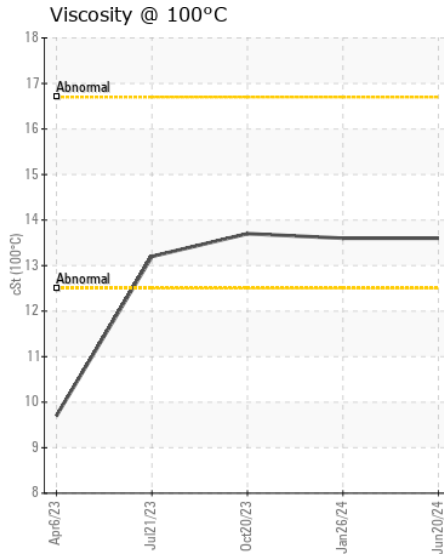
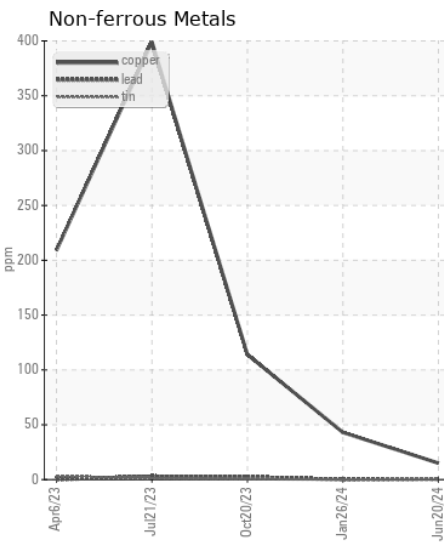
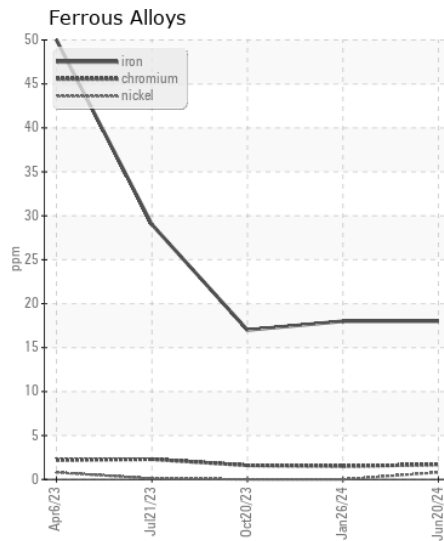
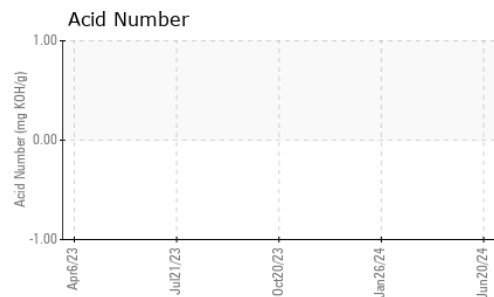
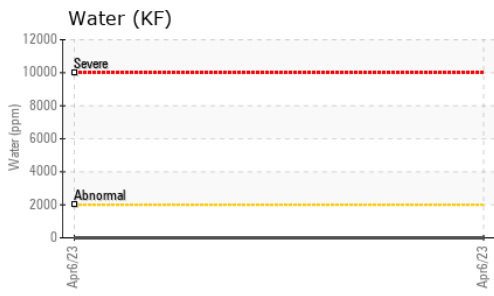
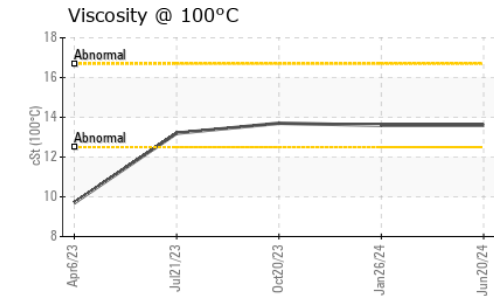
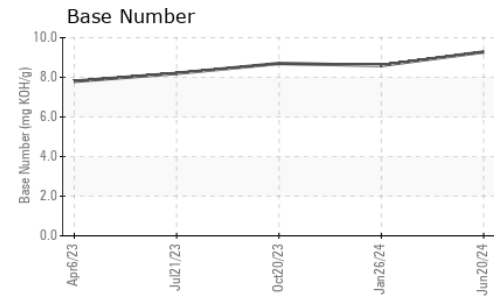
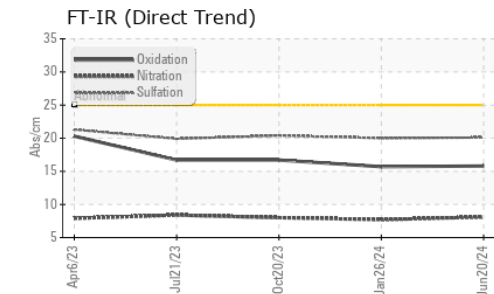
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	2	4
Potassium	ppm	ASTM D5185m	>20	15	23	44
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	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.7	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	20.0	20.4
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		0	0	2
Boron	ppm	ASTM D5185m		<1	0	1
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		63	62	59
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		953	920	1041
Calcium	ppm	ASTM D5185m		1142	1073	1113
Phosphorus	ppm	ASTM D5185m		916	958	1020
Zinc	ppm	ASTM D5185m		1259	1194	1323
Sulfur	ppm	ASTM D5185m		2725	2634	2614
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	15.7	16.7
Base Number (BN)	mg KOH/g	ASTM D2896		9.28	8.6	8.7
Visc @ 100°C	cSt	ASTM D445		13.6	13.6	13.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0001605 **Received** : 17 Jul 2024
Lab Number : 06239324 **Tested** : 19 Jul 2024
Unique Number : 11128158 **Diagnosed** : 19 Jul 2024 - Sean Felton
Test Package : PLANT (Additional Tests: FT-IR, KV100, TBN)

Sapp Bros. Fleet - Ogallala 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)