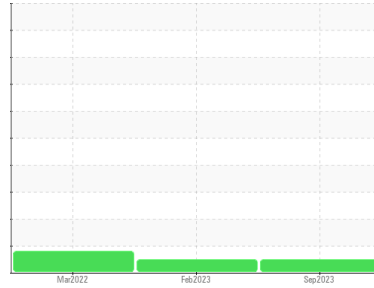




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
3085
 Component
Diesel Engine
 Fluid
AMERIGUARD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			SBP0005514	SBP0001642	SBP0000755
Sample Date	Client Info			19 Sep 2023	28 Feb 2023	19 Mar 2022
Machine Age	mls	Client Info		51907	41663	20469
Oil Age	mls	Client Info		10244	10000	20469
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	0.2
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	12	23	32
Chromium	ppm	ASTM D5185m	>5	<1	1	2
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	5	6	11
Lead	ppm	ASTM D5185m	>30	1	3	0
Copper	ppm	ASTM D5185m	>150	121	225	▲ 269
Tin	ppm	ASTM D5185m	>5	3	3	6
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	10	38
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		65	51	40
Manganese	ppm	ASTM D5185m		<1	2	3
Magnesium	ppm	ASTM D5185m		1113	886	535
Calcium	ppm	ASTM D5185m		1240	1306	1844
Phosphorus	ppm	ASTM D5185m		1069	894	766
Zinc	ppm	ASTM D5185m		1395	1184	918
Sulfur	ppm	ASTM D5185m		2542	2268	1822

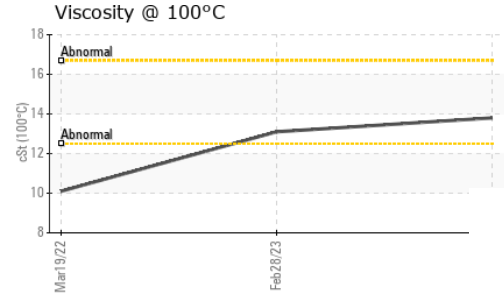
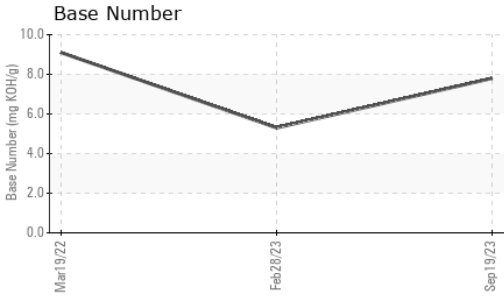
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	2	4	7
Sodium	ppm	ASTM D5185m		3	2	3
Potassium	ppm	ASTM D5185m	>20	14	18	27

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.5	9.6	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	21.6	23.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	20.0	24.4
Base Number (BN)	mg KOH/g	ASTM D2896		7.8	5.3	9.1



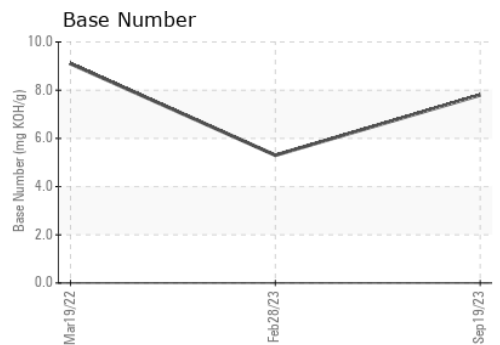
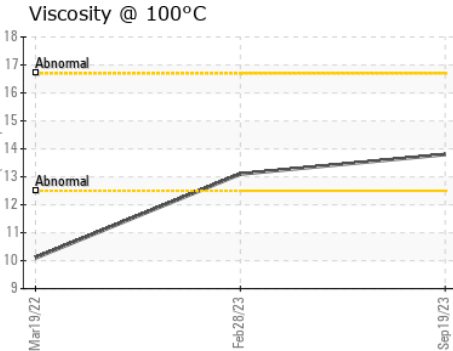
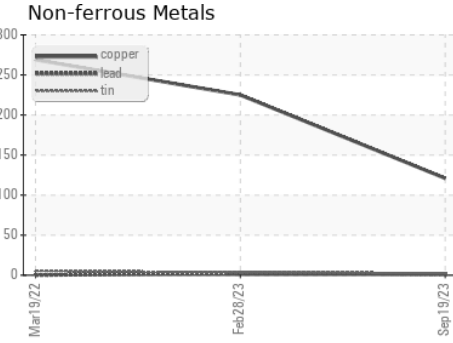
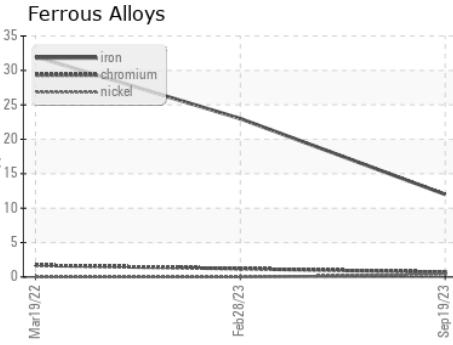
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.8	13.1	10.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0005514 **Received** : 04 Oct 2023
Lab Number : **05968598** **Diagnosed** : 04 Oct 2023
Unique Number : 10675149 **Diagnostician** : Wes Davis
Test Package : FLEET

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)