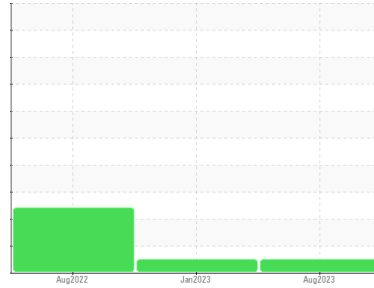




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
5047
 Component
Diesel Engine
 Fluid
AMERIGUARD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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		SBP0004656	SBP0001692	SBP0001666
Sample Date	Client Info		16 Aug 2023	16 Jan 2023	19 Aug 2022
Machine Age	mls	Client Info	194220	183928	172997
Oil Age	mls	Client Info	10292	10931	11506
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	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >80	36	34	50
Chromium	ppm	ASTM D5185m >5	2	2	3
Nickel	ppm	ASTM D5185m >2	<1	<1	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >30	11	7	▲ 12
Lead	ppm	ASTM D5185m >30	<1	2	2
Copper	ppm	ASTM D5185m >150	2	2	3
Tin	ppm	ASTM D5185m >5	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	7	5	37
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	70	72	74
Manganese	ppm	ASTM D5185m	<1	1	<1
Magnesium	ppm	ASTM D5185m	1125	1127	916
Calcium	ppm	ASTM D5185m	1260	1348	1395
Phosphorus	ppm	ASTM D5185m	1230	1074	978
Zinc	ppm	ASTM D5185m	1514	1430	1232
Sulfur	ppm	ASTM D5185m	3478	3594	3558

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	8	10	▲ 28
Sodium	ppm	ASTM D5185m	10	6	7
Potassium	ppm	ASTM D5185m >20	12	8	8

INFRA-RED

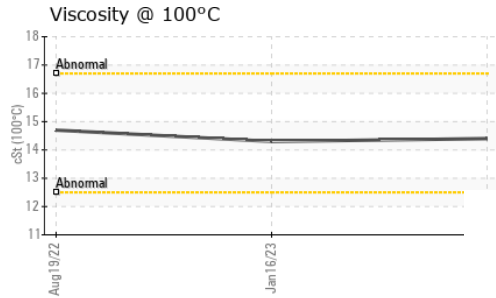
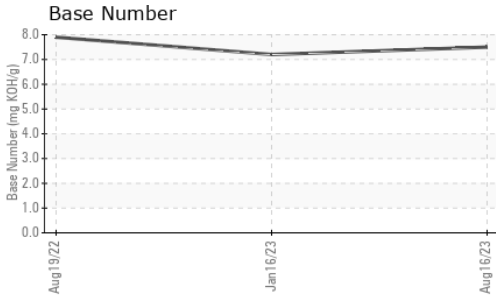
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.8	0.8	0.9
Nitration	Abs/cm	*ASTM D7624 >20	12.8	14.2	16.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.5	26.1	30.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	22.1	25.3	30.2
Base Number (BN)	mg KOH/g	ASTM D2896	7.5	7.2	7.9



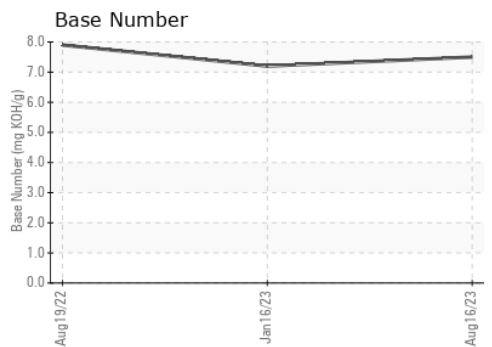
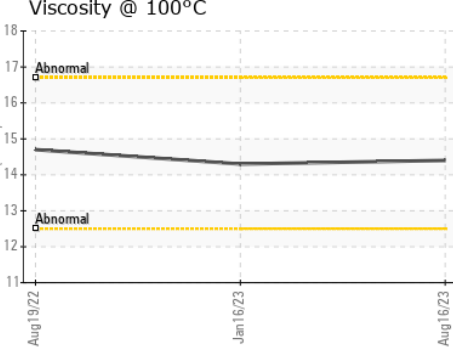
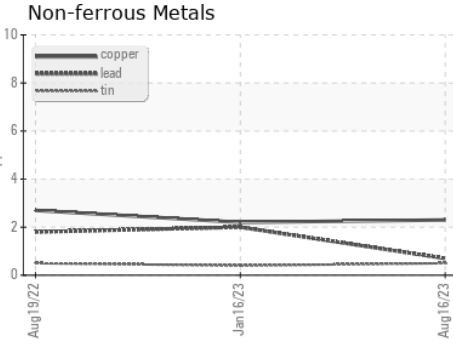
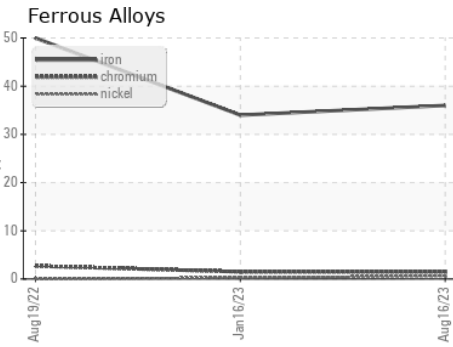
OIL ANALYSIS REPORT



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	14.4	14.3	14.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0004656 **Received** : 04 Oct 2023
Lab Number : **05968602** **Diagnosed** : 04 Oct 2023
Unique Number : 10675153 **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)

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F: