



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**93045**  
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		<b>SBP0001602</b>	SBP0005539	SBP0004660
Sample Date		Client Info		<b>14 Jun 2024</b>	02 Jan 2024	05 Sep 2023
Machine Age	mls	Client Info		<b>440163</b>	430492	422720
Oil Age	mls	Client Info		<b>9671</b>	7772	10118
Filter Age	mls	Client Info		<b>9671</b>	7772	10118
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>9</b>	10	16
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	1	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	11
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	1
Aluminum	ppm	ASTM D5185m	>30	<b>3</b>	2	4
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>150	<b>1</b>	2	5
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

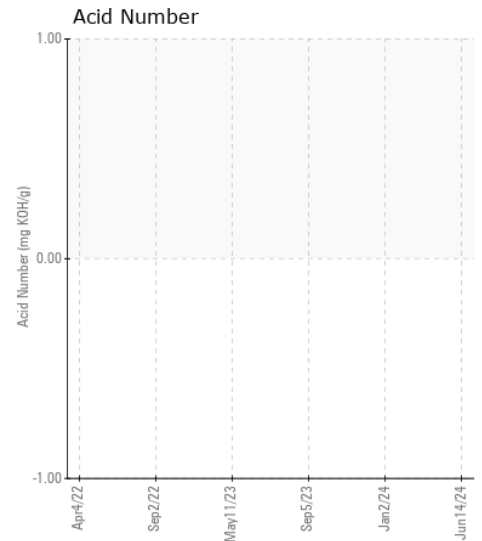
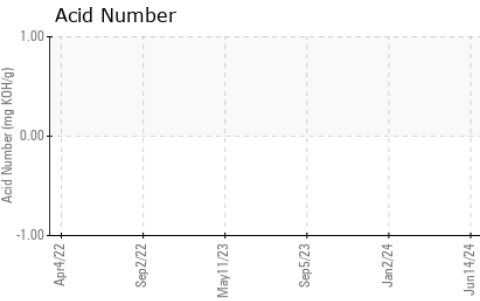
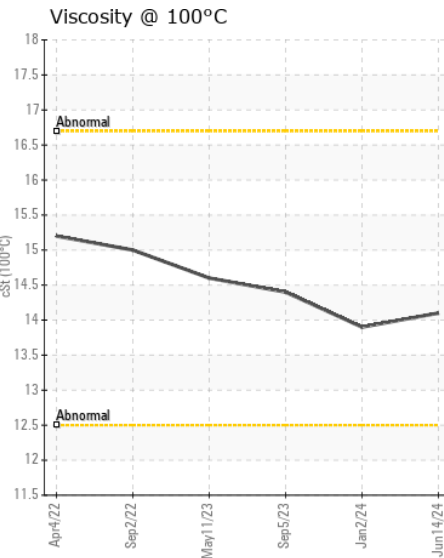
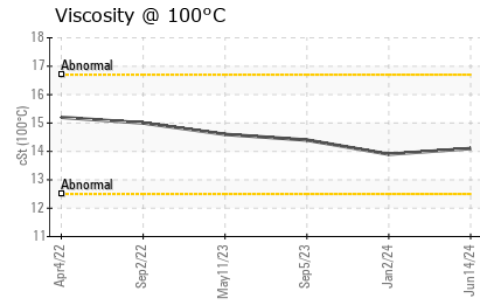
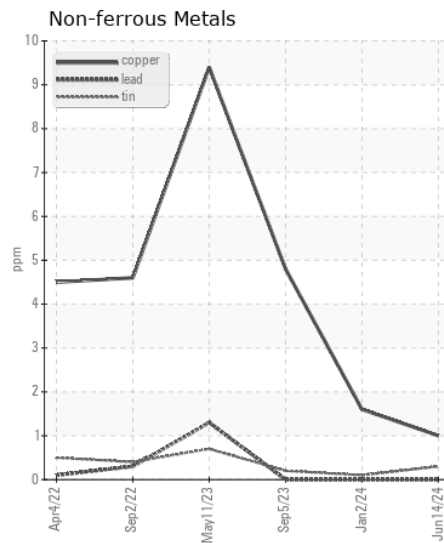
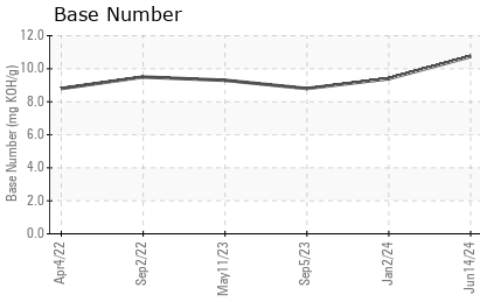
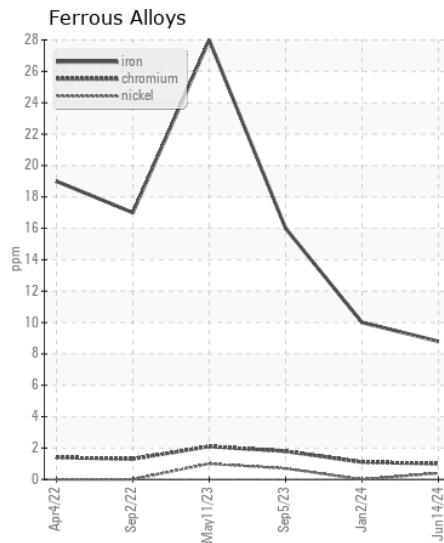
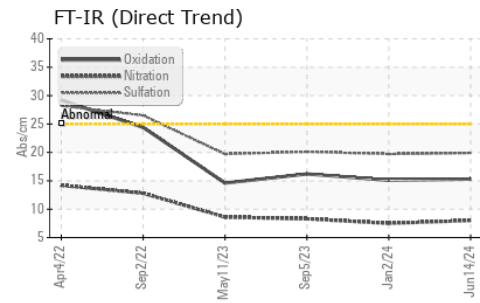
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	5	9
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	5
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	%	ASTM D6304	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.0</b>	7.5	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.9</b>	19.7	20.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>2</b>	2	4
Boron	ppm	ASTM D5185m		<b>4</b>	12	13
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>61</b>	54	56
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>1040</b>	1017	988
Calcium	ppm	ASTM D5185m		<b>1190</b>	1189	1316
Phosphorus	ppm	ASTM D5185m		<b>1153</b>	1092	1170
Zinc	ppm	ASTM D5185m		<b>1393</b>	1361	1472
Sulfur	ppm	ASTM D5185m		<b>3885</b>	3409	3623
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.3</b>	15.1	16.2
Base Number (BN)	mg KOH/g	ASTM D2896		<b>10.74</b>	9.4	8.8
Visc @ 100°C	cSt	ASTM D445		<b>14.1</b>	13.9	14.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0001602  
**Lab Number** : 06227691  
**Unique Number** : 11111184  
**Test Package** : PLANT ( Additional Tests: FT-IR, KV100, TBN )

**Sapp Bros. Fleet - Ogallala Location**

**Received** : 03 Jul 2024  
**Tested** : 06 Jul 2024  
**Diagnosed** : 06 Jul 2024 - Don Baldrige

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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