



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
93040
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		SBP0005887	SBP0001582	SBP0005536
Sample Date		Client Info		06 May 2024	19 Feb 2024	19 Dec 2023
Machine Age	mls	Client Info		786821	776263	766445
Oil Age	mls	Client Info		10558	9818	20527
Filter Age	mls	Client Info		10558	0	20527
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	18	18	27
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>2	1	<1	1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	1	0
Aluminum	ppm	ASTM D5185m	>30	3	4	4
Lead	ppm	ASTM D5185m	>30	1	0	0
Copper	ppm	ASTM D5185m	>150	42	143	▲ 215
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
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.

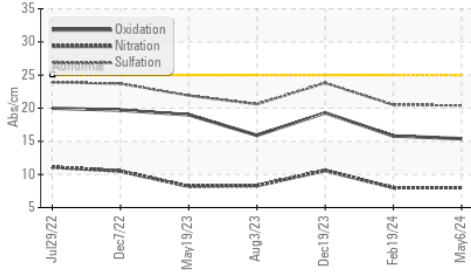
Silicon	ppm	ASTM D5185m	>20	4	4	7
Potassium	ppm	ASTM D5185m	>20	22	<1	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	0.8	1.9
Nitration	Abs/cm	*ASTM D7624	>20	8.0	8.0	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	20.5	23.8
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

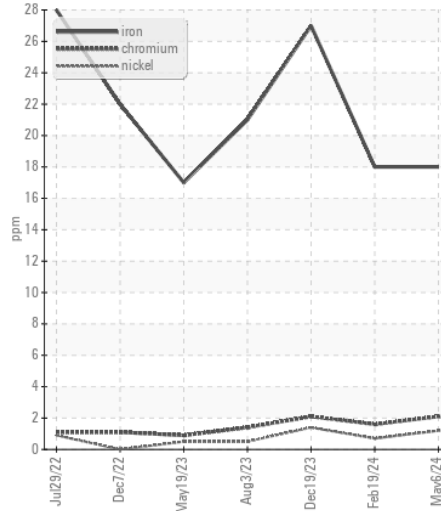
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		16	<1	3
Boron	ppm	ASTM D5185m		0	0	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		64	62	63
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		1046	1025	975
Calcium	ppm	ASTM D5185m		1290	1115	1084
Phosphorus	ppm	ASTM D5185m		1152	1095	972
Zinc	ppm	ASTM D5185m		1418	1346	1270
Sulfur	ppm	ASTM D5185m		3656	2796	2136
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.4	15.8	19.3
Base Number (BN)	mg KOH/g	ASTM D2896		8.9	10.69	8.2
Visc @ 100°C	cSt	ASTM D445		14.2	14.3	15.0

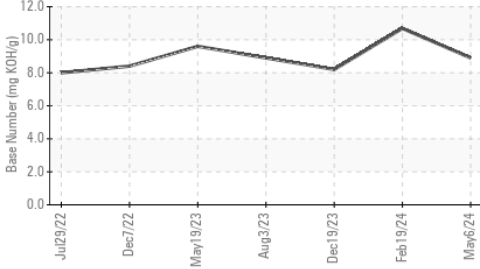
FT-IR (Direct Trend)



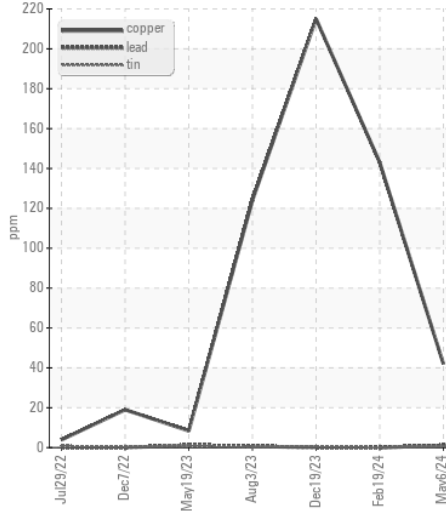
Ferrous Alloys



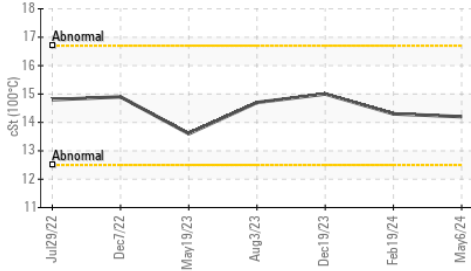
Base Number



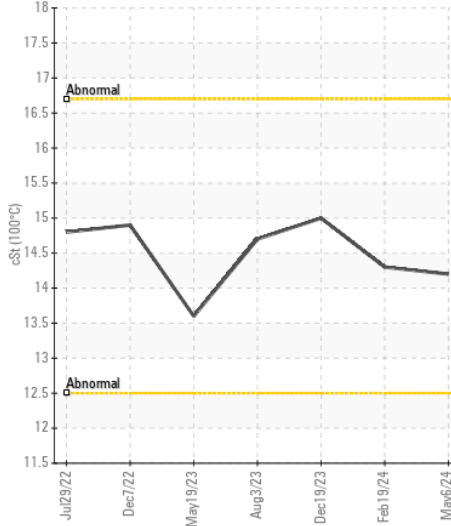
Non-ferrous Metals



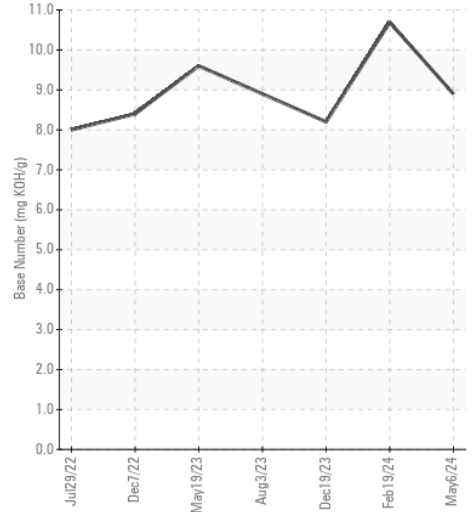
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0005887
Lab Number : 06195044
Unique Number : 11057167
Test Package : FLEET

Sapp Bros. Fleet - Ogallala Location

Received : 30 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Wes Davis

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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