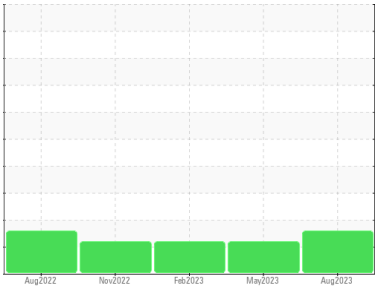
PROBLEM SUMMARY

Sample Rating Trend

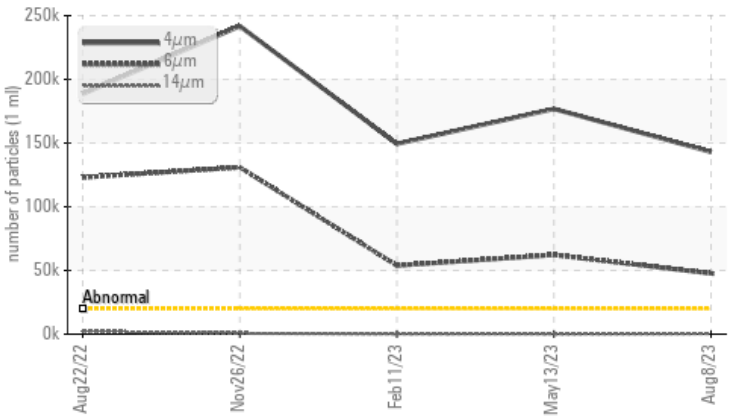


VISCOSITY

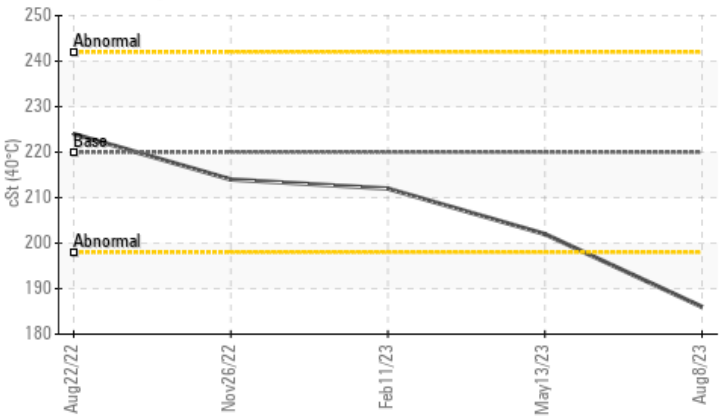
Area
[16018160]
Machine Id
MAIN BREAK SHOULDER CIRCULAR SAW (S/N RX81DV132K4KS)
Component
Gearbox
Fluid
GEAR OIL (PAO) ISO 220 (2 LTR)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Viscosity @ 40°C



RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Particles >4µm		ASTM D7647	>20000	▲ **143020**	▲ 176811	▲ 149364
Particles >6µm		ASTM D7647	>5000	▲ **47696**	▲ 62234	▲ 53855
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/23/16**	▲ 25/23/14	▲ 24/23/15
Visc @ 40°C	cSt	ASTM D445	220	▲ **186**	202	212

Customer Id: SMIMILMO
Sample No.: USPR000644
Lab Number: 05922237
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

13 May 2023 Diag: Doug Bogart

ISO

Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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11 Feb 2023 Diag: Doug Bogart

ISO

Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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26 Nov 2022 Diag: Doug Bogart

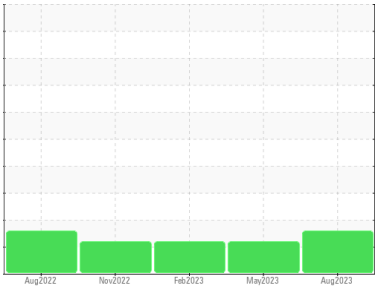
ISO

Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Area
[16018160]
Machine Id
MAIN BREAK SHOULDER CIRCULAR SAW (S/N RX81DV132K4KS)
Component
Gearbox
Fluid
GEAR OIL (PAO) ISO 220 (2 LTR)

DIAGNOSIS

Recommendation
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition
The oil viscosity is lower than normal. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USPR000644**	USP241916	USPM23931
Sample Date		Client Info		**08 Aug 2023**	13 May 2023	11 Feb 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**45**	54	70
Chromium	ppm	ASTM D5185m	>15	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>15	**0**	<1	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**2**	<1	0
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**<1**	0	0
Tin	ppm	ASTM D5185m	>25	**0**	<1	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

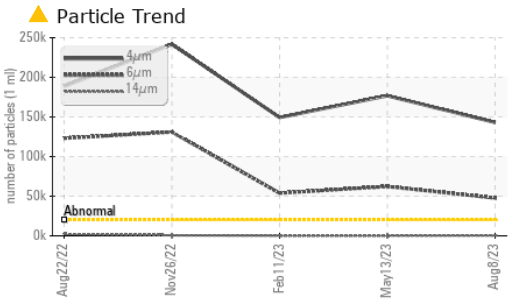
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	25	**<1**	2	0
Barium	ppm	ASTM D5185m	12	**0**	0	0
Molybdenum	ppm	ASTM D5185m	5	**0**	0	0
Manganese	ppm	ASTM D5185m		**2**	3	3
Magnesium	ppm	ASTM D5185m	25	**0**	3	<1
Calcium	ppm	ASTM D5185m	25	**0**	3	3
Phosphorus	ppm	ASTM D5185m	375	**623**	655	604
Zinc	ppm	ASTM D5185m	25	**0**	0	10
Sulfur	ppm	ASTM D5185m	4900	**763**	1040	962

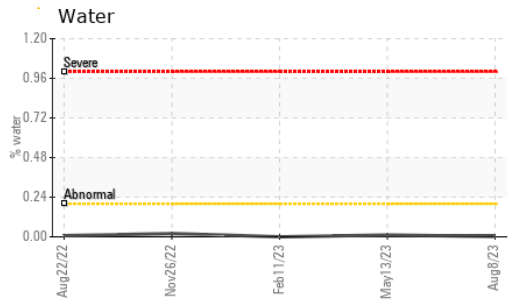
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**3**	3	5
Sodium	ppm	ASTM D5185m		**<1**	<1	0
Potassium	ppm	ASTM D5185m	>20	**0**	2	2
Water	%	ASTM D6304	>0.2	**0.002**	0.011	0.00
ppm Water	ppm	ASTM D6304	>2000	**19.7**	119.0	0.00

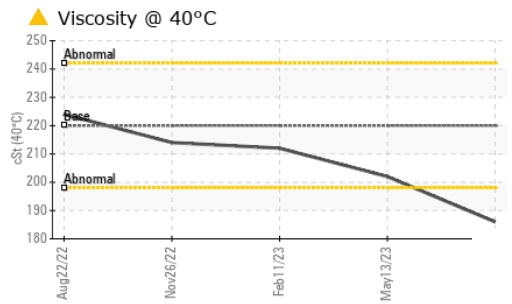
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **143020**	▲ 176811	▲ 149364
Particles >6µm		ASTM D7647	>5000	▲ **47696**	▲ 62234	▲ 53855
Particles >14µm		ASTM D7647	>640	**372**	136	165
Particles >21µm		ASTM D7647	>160	**31**	5	21
Particles >38µm		ASTM D7647	>40	**2**	0	2
Particles >71µm		ASTM D7647	>10	**1**	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/23/16**	▲ 25/23/14	▲ 24/23/15

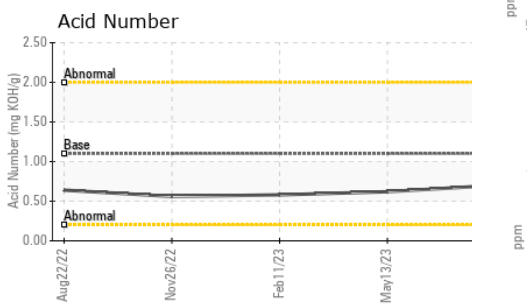
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.10	**0.70**	0.62	0.58

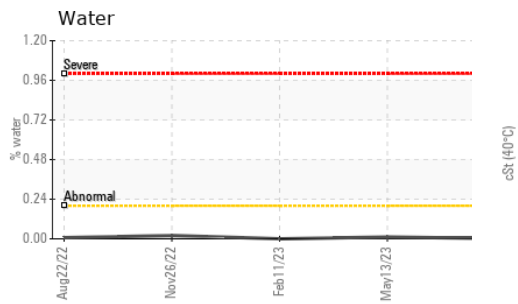
OIL ANALYSIS REPORT





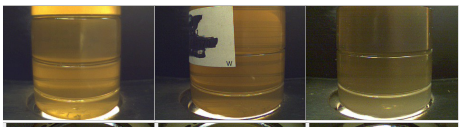




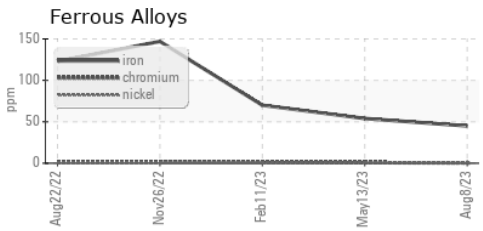


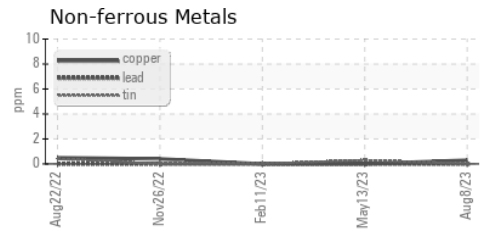
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

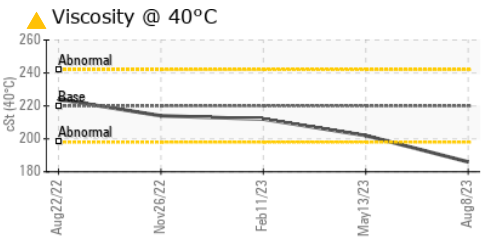
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	▲ **186**	202	212

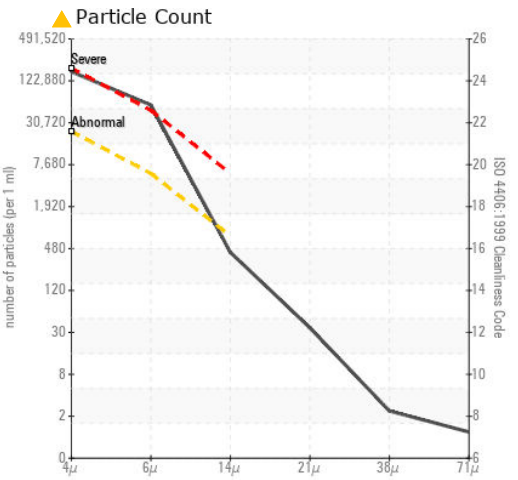
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

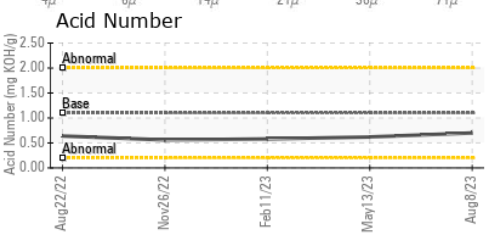
GRAPHS











Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPR000644
Lab Number : 05922237
Unique Number : 10602184
Test Package : IND 2

Received : 11 Aug 2023
Diagnosed : 14 Aug 2023
Diagnostician : Doug Bogart

SMITHFIELD FOODS - SMIMIL
22123 HWY 5
MILAN, MO
US 63556
Contact:
T:
F:

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)