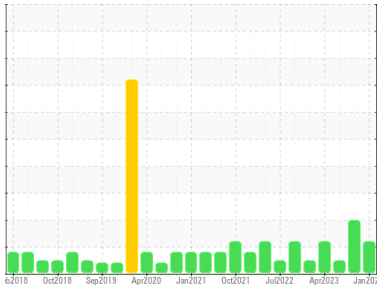
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
RX C
Machine Id
RXC AGITATOR A106 (S/N 7600468)
Component
Gearbox
Fluid
SCHAEFFER 209 MOLY UNIVERSAL GEARLUBE ISO 220 (20 GAL)

DIAGNOSIS

Recommendation
Filter oil if possible using B6=75 filter media or better. Investigate sample procedures and possible sources of contamination. No other action necessary at this time. Resample at next normal interval.

Wear
Wear particles are low, steady, and acceptable.

Contamination
Particle contamination is significantly elevated from previous sample. Filtration can help to extend machine life.

Fluid Condition
Fluid health is acceptable for continued use. Viscosity is slightly above reference viscosity, but otherwise healthy.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PLS0000812**	PLS0000658	PLS0000650
Sample Date		Client Info		**05 Jan 2024**	09 Oct 2023	25 Jul 2023
Machine Age	yrs	Client Info		**0**	0	0
Oil Age	yrs	Client Info		**1**	1	1
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**20**	14	16
Iron	ppm	ASTM D5185m	>200	**12**	12	11
Chromium	ppm	ASTM D5185m	>15	**0**	0	<1
Nickel	ppm	ASTM D5185m	>15	**0**	0	<1
Titanium	ppm	ASTM D5185m		**<1**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**2**	2	0
Lead	ppm	ASTM D5185m	>100	**<1**	0	3
Copper	ppm	ASTM D5185m	>200	**3**	9	11
Tin	ppm	ASTM D5185m	>25	**0**	0	<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	65	**27**	28	23
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m	325	**395**	436	374
Manganese	ppm	ASTM D5185m		**<1**	0	2
Magnesium	ppm	ASTM D5185m		**2**	3	3
Calcium	ppm	ASTM D5185m		**43**	47	48
Phosphorus	ppm	ASTM D5185m	875	**1119**	1137	1007
Zinc	ppm	ASTM D5185m		**17**	13	<1
Sulfur	ppm	ASTM D5185m	16000	**23293**	22373	23416

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**12**	10	10
Sodium	ppm	ASTM D5185m		**0**	2	6
Potassium	ppm	ASTM D5185m	>20	**2**	1	4

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0**	0	0
Nitration	Abs/cm	*ASTM D7624		**4.1**	4.1	4.2
Sulfation	Abs/.1mm	*ASTM D7415		**15.0**	14.5	14.9

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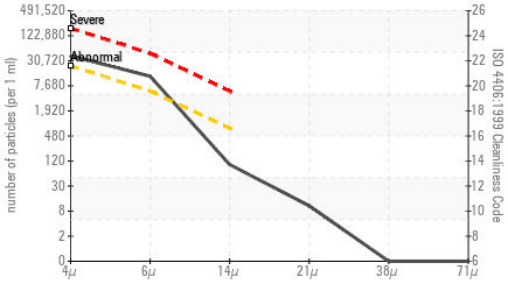
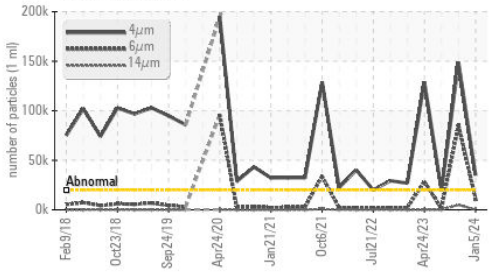
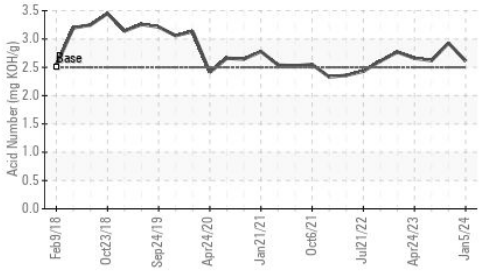
Particle Count



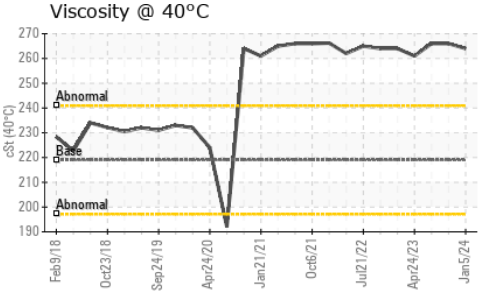
Particle Trend



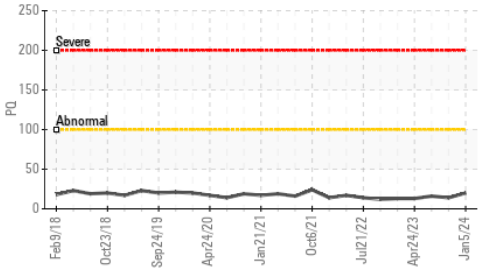
Acid Number



Viscosity @ 40°C



PQ



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **34921**	▲ 148784	19626
Particles >6µm		ASTM D7647	>5000	▲ **11325**	▲ 85006	1247
Particles >14µm		ASTM D7647	>640	**87**	▲ 4985	22
Particles >21µm		ASTM D7647	>160	**9**	▲ 206	6
Particles >38µm		ASTM D7647	>40	**0**	0	2
Particles >71µm		ASTM D7647	>10	**0**	0	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **22/21/14**	▲ 24/24/19	21/17/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414		**5.1**	4.9	5.3
Acid Number (AN)	mg KOH/g	ASTM D8045	2.5	**2.61**	2.928	2.62

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	219	**264**	266	266

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PLS0000812 **Received** : 11 Jan 2024
Lab Number : 06057973 **Tested** : 12 Jan 2024
Unique Number : 10829355 **Diagnosed** : 06 Feb 2024 - Mike Johnson
Test Package : IND 2 (Additional Tests: FT-IR, PQ, PrtCount)

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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