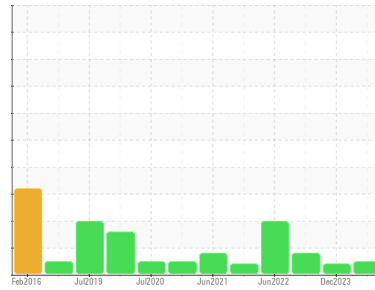




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
RECOVERY
Machine Id
FILTRATE TK 1 - AGITATOR
Component
Gearbox
Fluid
SHELL OMALA S4 WE 460 (1 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. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0915920	WC0887329	WC0771454
Sample Date	Client Info			05 Jun 2024	14 Dec 2023	26 Dec 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ATTENTION

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	0	0	2
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>15	<1	<1	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	<1	2	<1
Lead	ppm	ASTM D5185m	>100	0	0	<1
Copper	ppm	ASTM D5185m	>200	7	6	25
Tin	ppm	ASTM D5185m	>25	2	<1	5
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		1	<1	0
Barium	ppm	ASTM D5185m		<1	10	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		2	<1	2
Calcium	ppm	ASTM D5185m		4	<1	<1
Phosphorus	ppm	ASTM D5185m		410	348	396
Zinc	ppm	ASTM D5185m		8	0	1
Sulfur	ppm	ASTM D5185m		23	11	27

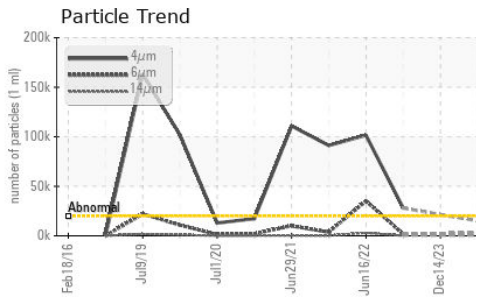
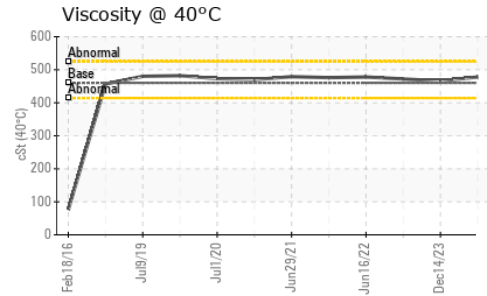
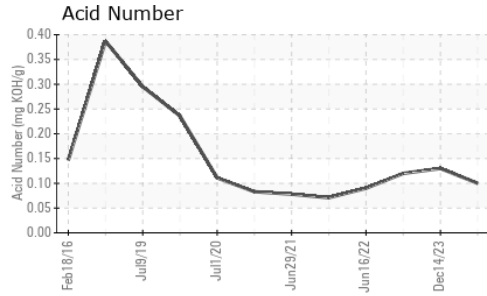
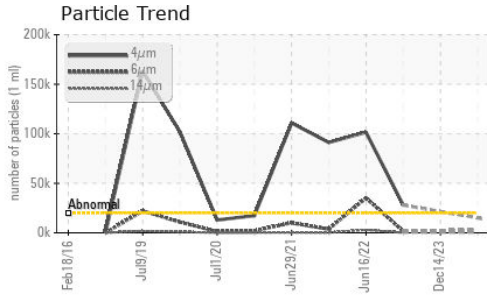
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	11	9	10
Sodium	ppm	ASTM D5185m		0	5	0
Potassium	ppm	ASTM D5185m	>20	5	2	3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	15049	---	● 27959
Particles >6µm		ASTM D7647	>5000	2801	---	● 1701
Particles >14µm		ASTM D7647	>640	156	---	● 95
Particles >21µm		ASTM D7647	>160	35	---	● 31
Particles >38µm		ASTM D7647	>40	4	---	● 3
Particles >71µm		ASTM D7647	>10	1	---	● 1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/19/14	---	● 22/18/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.10	0.13	0.12



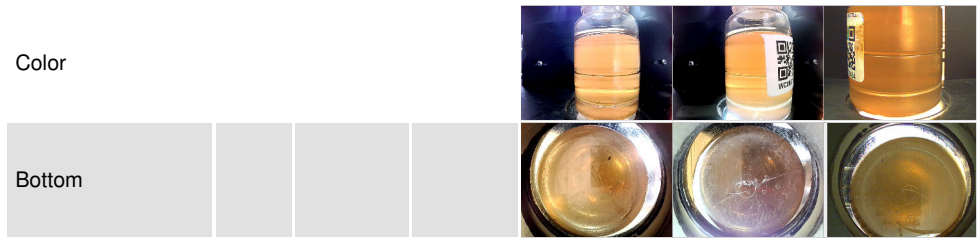
OIL ANALYSIS REPORT



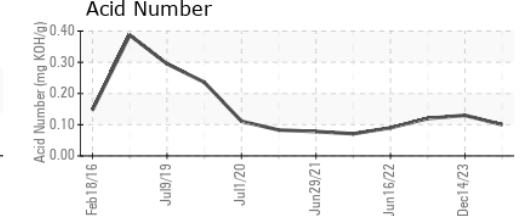
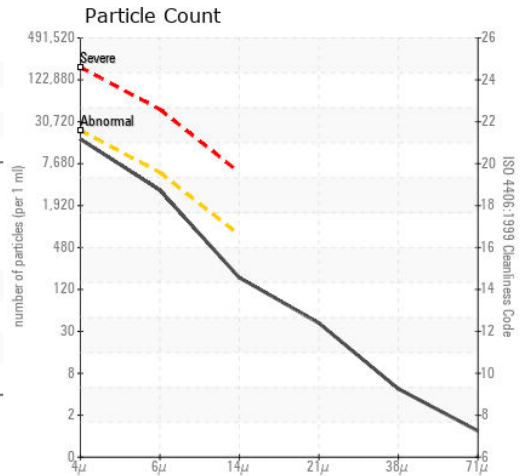
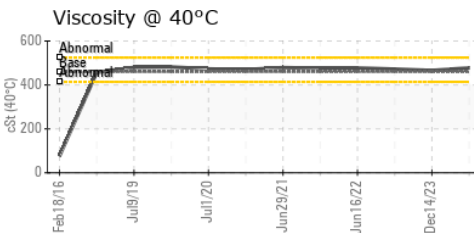
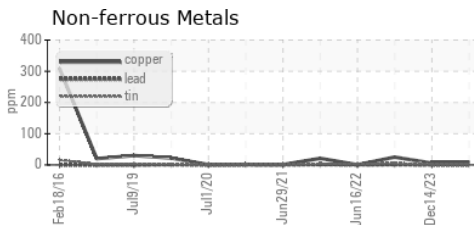
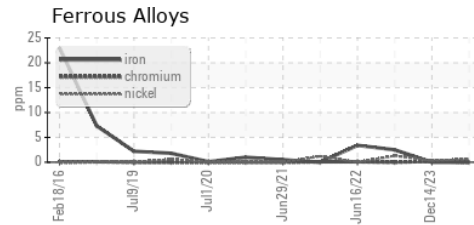
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 @ 40°C	cSt	ASTM D445 460	478	466	472

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0915920

Lab Number : 06204560

Unique Number : 11072021

Test Package : IND 2 (Additional Tests: 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)

Received : 10 Jun 2024

Tested : 12 Jun 2024

Diagnosed : 12 Jun 2024 - Angela Borella

LUBRIZOL ADVANCED MATERIALS INC

207 TELEGRAPH DR

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US 28056

Contact: TIMOTHY DAVIS

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T: (704)915-4131

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