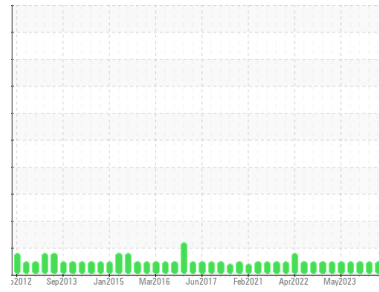


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
TEST STAND 1

Component
Hydraulic System

Fluid
SAFETY-KLEEN PERFORMANCE PLUS HYD. AW32 (300 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 suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		ST46392	ST46389	ST41960
Sample Date	Client Info		28 May 2024	12 Feb 2024	14 Nov 2023
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	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >40	<1	0	<1
Chromium	ppm	ASTM D5185m >4	<1	0	<1
Nickel	ppm	ASTM D5185m >20	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >4	3	0	0
Lead	ppm	ASTM D5185m >10	1	1	1
Copper	ppm	ASTM D5185m >60	32	32	33
Tin	ppm	ASTM D5185m >4	<1	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 11	0	0	0
Barium	ppm	ASTM D5185m 0.0	0	<1	0
Molybdenum	ppm	ASTM D5185m 1.2	0	0	<1
Manganese	ppm	ASTM D5185m	<1	1	<1
Magnesium	ppm	ASTM D5185m 0.0	<1	2	<1
Calcium	ppm	ASTM D5185m 35	43	47	52
Phosphorus	ppm	ASTM D5185m 324	288	328	421
Zinc	ppm	ASTM D5185m 400	463	422	500
Sulfur	ppm	ASTM D5185m 1528	1017	888	1212

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<1	<1	1
Sodium	ppm	ASTM D5185m	0	3	<1
Potassium	ppm	ASTM D5185m >20	2	<1	1
Water	%	ASTM D6304 >0.05	0.006	0.003	0.003
ppm Water	ppm	ASTM D6304 >500	62	34	36

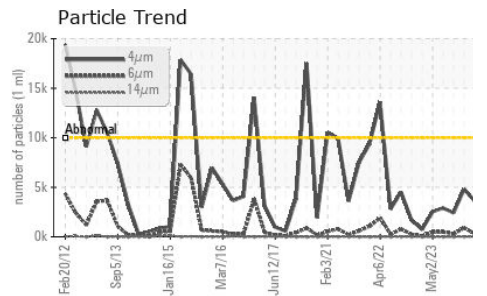
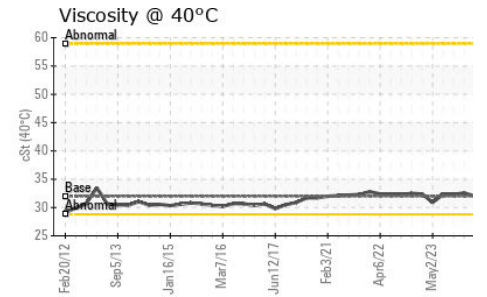
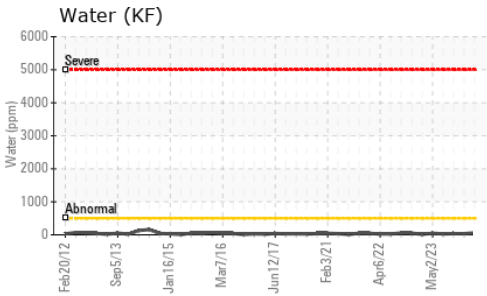
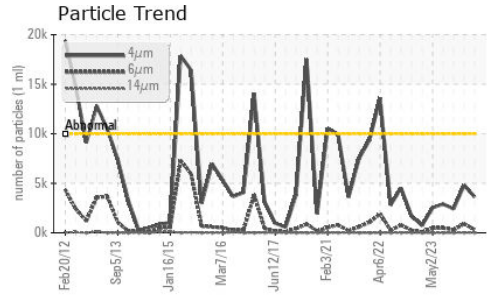
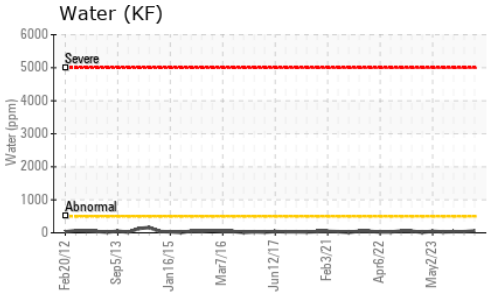
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	3624	4793	2408
Particles >6µm	ASTM D7647	>1300	318	919	294
Particles >14µm	ASTM D7647	>160	11	22	7
Particles >21µm	ASTM D7647	>40	5	4	2
Particles >38µm	ASTM D7647	>10	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/17/14	19/15/11	19/17/12	18/15/10

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.36	0.33	0.29

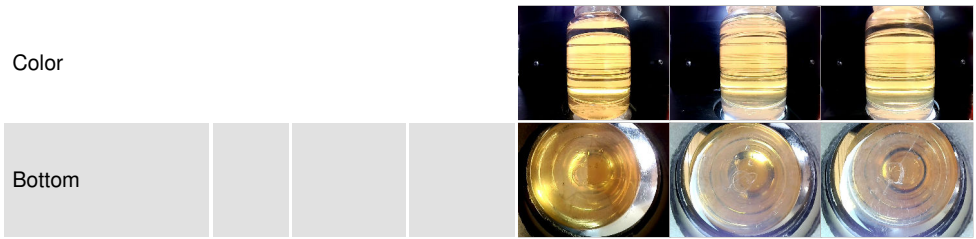
OIL ANALYSIS REPORT



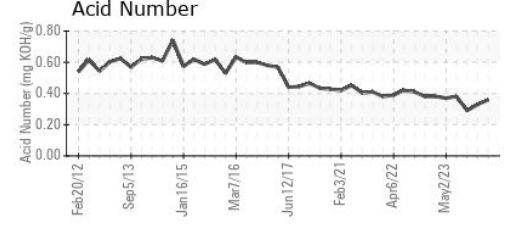
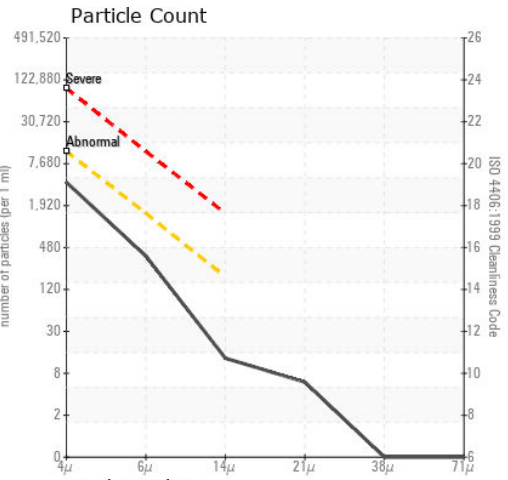
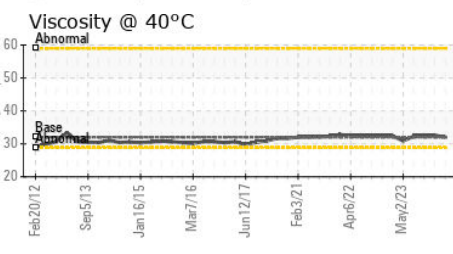
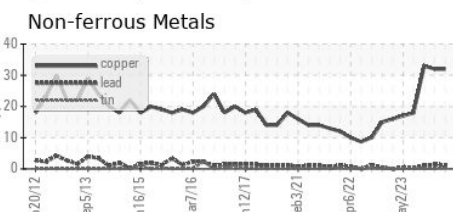
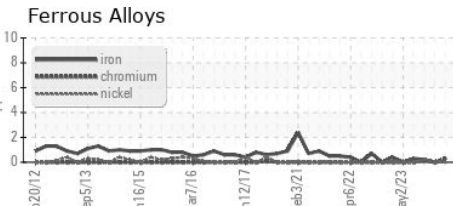
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.0	32.6	32.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST46392
Lab Number : 06199191
Unique Number : 11061314
Test Package : IND 2 (Additional Tests: KF)
Received : 04 Jun 2024
Tested : 05 Jun 2024
Diagnosed : 06 Jun 2024 - Don Baldrige

WOOSTER HYDROSTATICS
 4570 W. OLD LINCOLN WAY
 WOOSTER, OH
 US 44691
 Contact: TOM NADELIN
 tomnadelin@woosterhydrostatics.com

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)