

Machine Id
TEST STAND 2

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
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

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		ST41951	ST41959	ST41961
Sample Date	Client Info		14 Nov 2023	14 Aug 2023	02 May 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	1	0
Chromium	ppm	ASTM D5185m >4	<1	0	0
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >4	0	0	0
Lead	ppm	ASTM D5185m >10	<1	<1	<1
Copper	ppm	ASTM D5185m >60	19	18	21
Tin	ppm	ASTM D5185m >4	0	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 11	0	0	0
Barium	ppm	ASTM D5185m 0.0	0	0	0
Molybdenum	ppm	ASTM D5185m 1.2	<1	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0.0	<1	0	<1
Calcium	ppm	ASTM D5185m 35	52	53	56
Phosphorus	ppm	ASTM D5185m 324	466	478	477
Zinc	ppm	ASTM D5185m 400	457	481	471
Sulfur	ppm	ASTM D5185m 1528	1019	2500	1059

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	1	2	<1
Sodium	ppm	ASTM D5185m	0	3	0
Potassium	ppm	ASTM D5185m >20	1	<1	1
Water	%	ASTM D6304 >0.05	0.004	0.003	0.004
ppm Water	ppm	ASTM D6304 >500	49	25.9	42.1

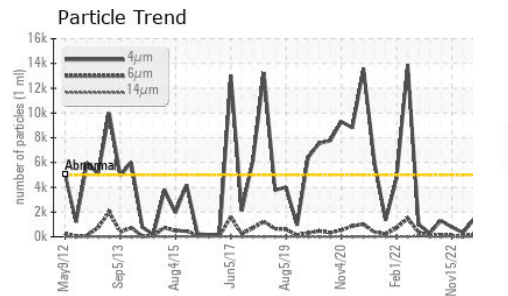
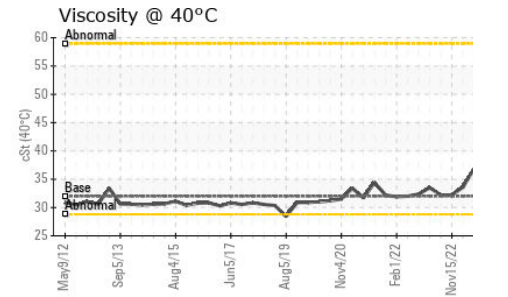
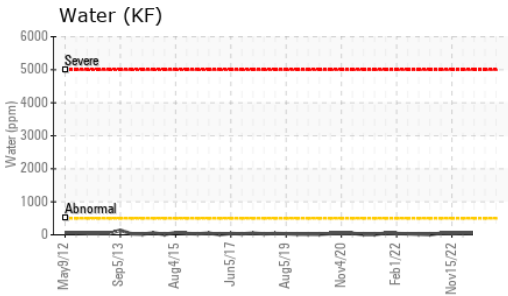
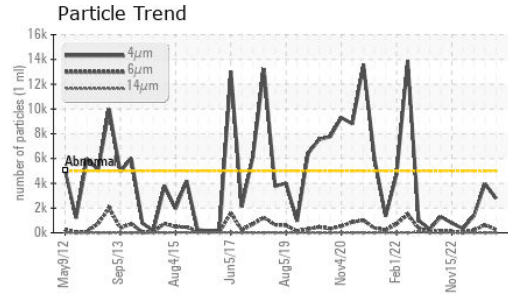
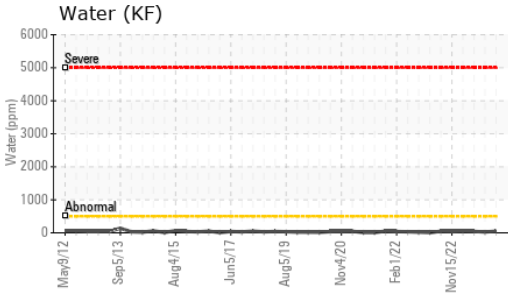
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	2781	3964	1379
Particles >6µm	ASTM D7647	>1300	247	628	219
Particles >14µm	ASTM D7647	>160	5	11	6
Particles >21µm	ASTM D7647	>40	0	3	1
Particles >38µm	ASTM D7647	>10	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/15/10	19/16/11	18/15/10

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.35	0.44	0.39

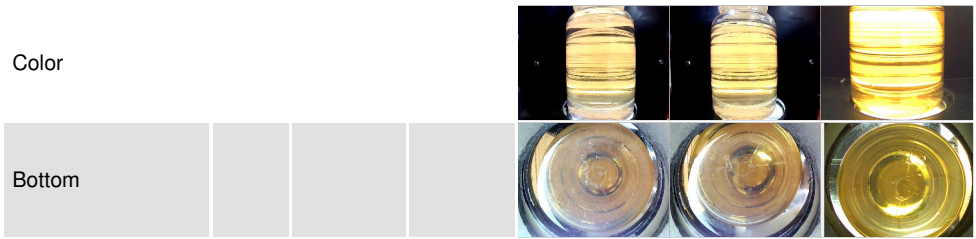
OIL ANALYSIS REPORT



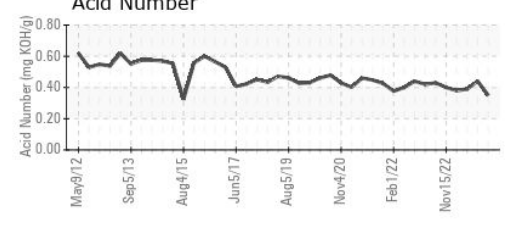
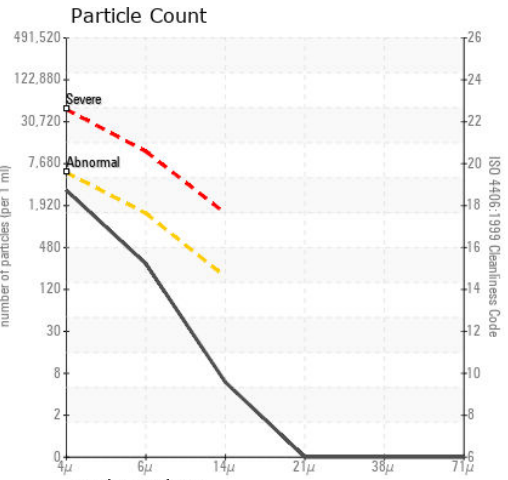
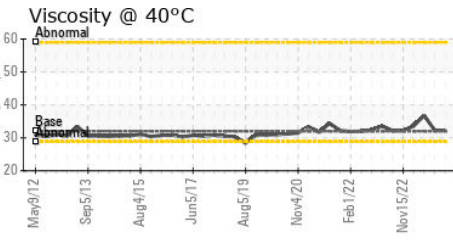
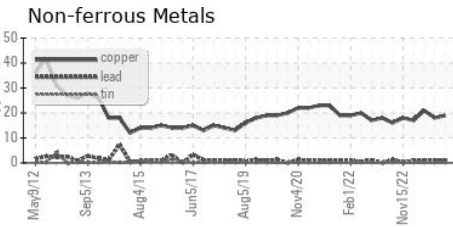
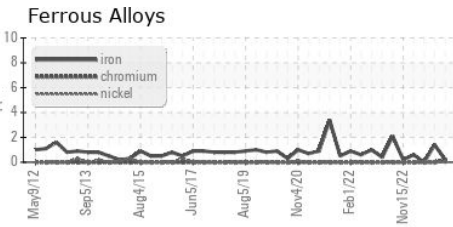
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	32.2	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. : ST41951 **Received** : 21 Nov 2023
Lab Number : 06014544 **Diagnosed** : 24 Nov 2023
Unique Number : 10753688 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF)

WOOSTER HYDROSTATICS
 4570 W. OLD LINCOLN WAY
 WOOSTER, OH
 US 44691
 Contact: TOM NADELIN
 tomnadelin@woosterhydrostatics.com
 T: (330)263-6555
 F: (330)263-4463

Certificate L2367
 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)