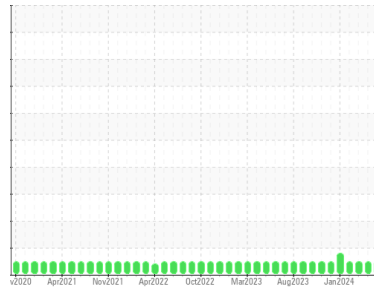




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

FINISHING

Machine Id

TandG Grade Line Hydraulic Unit (S/N SA205H05U)

Component

Hydraulic System

Fluid

VALVOLINE AW HYDRAULIC 68 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is 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	WC0895023	WC0895070	WC0895043
Sample Date	Client Info	13 May 2024	08 Apr 2024	11 Mar 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>20	2	1	0
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>20	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>20	1	<1	1
Copper	ppm	ASTM D5185m	>20	9	8	8
Tin	ppm	ASTM D5185m	>20	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	<1

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	2.6	<1	<1	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	3	2	2
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	1.9	12	11	11
Calcium	ppm	ASTM D5185m	81	101	98	90
Phosphorus	ppm	ASTM D5185m	350	342	367	309
Zinc	ppm	ASTM D5185m	445	430	435	426
Sulfur	ppm	ASTM D5185m	1850	863	996	818

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>15	1	0	0
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	2	2	1

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	829	930	256
Particles >6µm	ASTM D7647	>640	53	63	88
Particles >14µm	ASTM D7647	>80	5	7	12
Particles >21µm	ASTM D7647	>20	2	2	3
Particles >38µm	ASTM D7647	>4	1	0	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	17/13/10	17/13/10	15/14/11

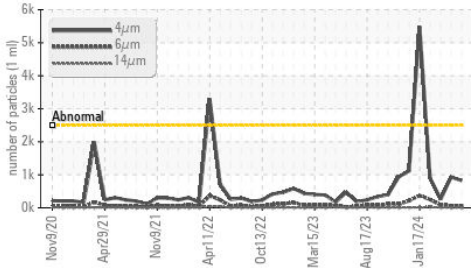
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045		0.40	0.42	0.39

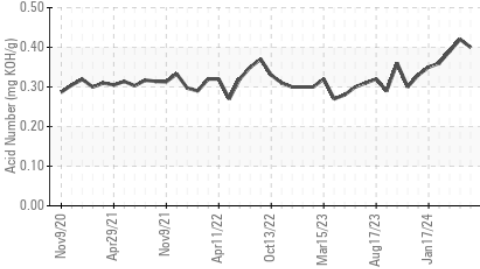


OIL ANALYSIS REPORT

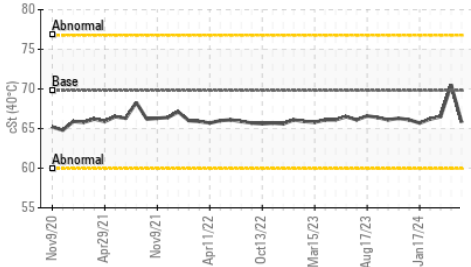
Particle Trend



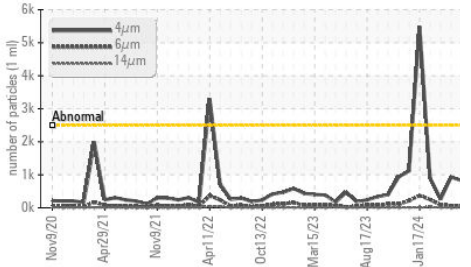
Acid Number



Viscosity @ 40°C



Particle Trend

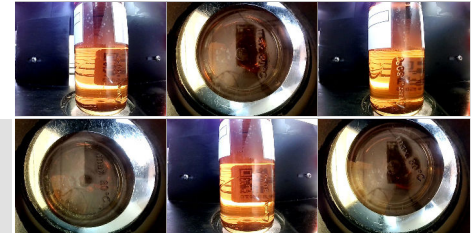
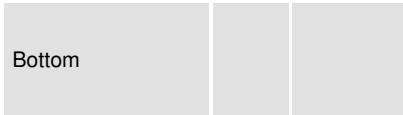


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	69.8	65.8	70.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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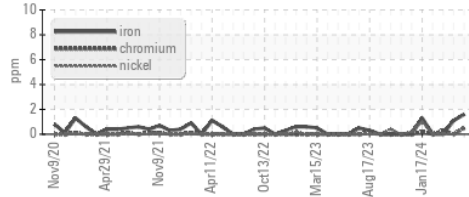
Color



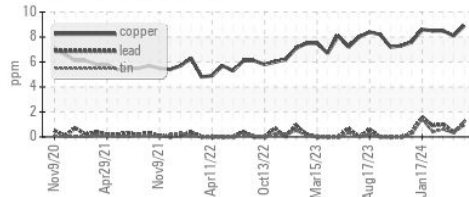
Bottom

GRAPHS

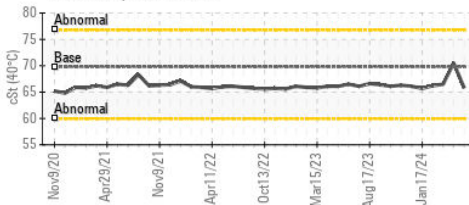
Ferrous Alloys



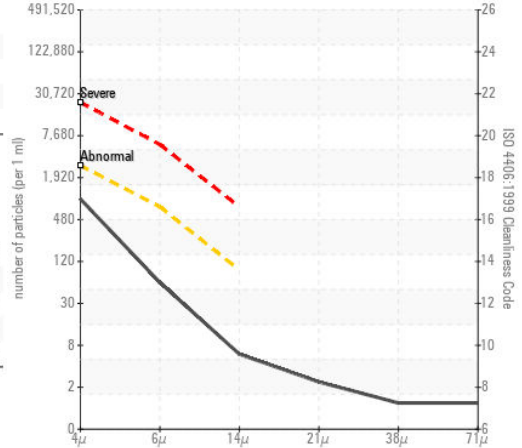
Non-ferrous Metals



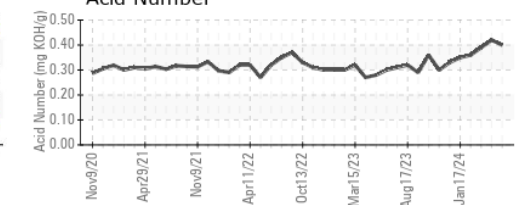
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0895023
 Lab Number : 06183317
 Unique Number : 11034643
 Test Package : IND 2

Received : 17 May 2024
 Tested : 20 May 2024
 Diagnosed : 20 May 2024 - Wes Davis

J.M. Huber Corporation
 PO BOX 38
 CRYSTAL HILL, VA
 US 24539
 Contact: Ted Hudson
 ted.hudson@huber.com
 T: (434)476-6628
 F: (434)476-8133

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)