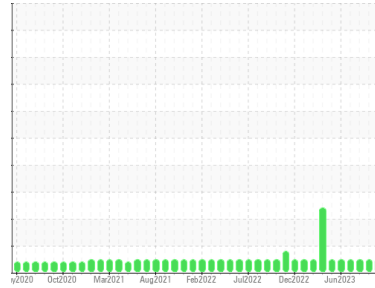




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
LOG YARD
 Machine Id
PORTAL CRANE GRAPPLE (S/N LY105B1)
 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		WC0782933	WC0783014	WC0782894
Sample Date	Client Info		13 Oct 2023	14 Sep 2023	17 Aug 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 >20	<1	2	2
Chromium	ppm	ASTM D5185m >20	0	0	<1
Nickel	ppm	ASTM D5185m >20	<1	0	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	0	3	0
Lead	ppm	ASTM D5185m >20	0	0	0
Copper	ppm	ASTM D5185m >20	<1	1	1
Tin	ppm	ASTM D5185m >20	0	0	0
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 2.6	<1	0	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	<1	2	2
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 1.9	5	10	10
Calcium	ppm	ASTM D5185m 81	84	90	91
Phosphorus	ppm	ASTM D5185m 350	299	365	363
Zinc	ppm	ASTM D5185m 445	464	448	487
Sulfur	ppm	ASTM D5185m 1850	937	1071	1089

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	<1	<1
Sodium	ppm	ASTM D5185m	1	3	2
Potassium	ppm	ASTM D5185m >20	<1	0	<1

FLUID CLEANLINESS

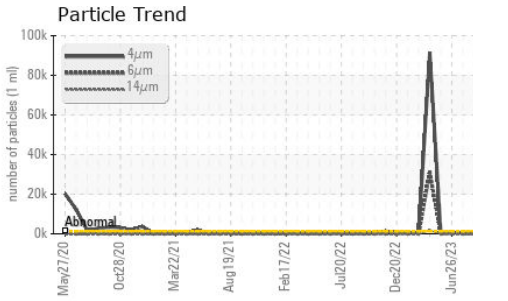
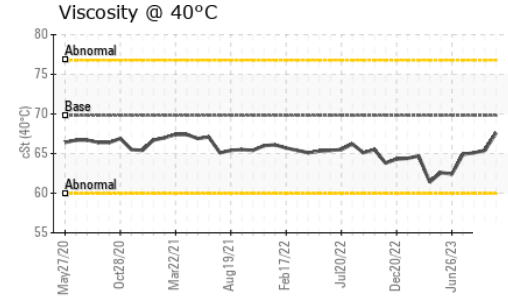
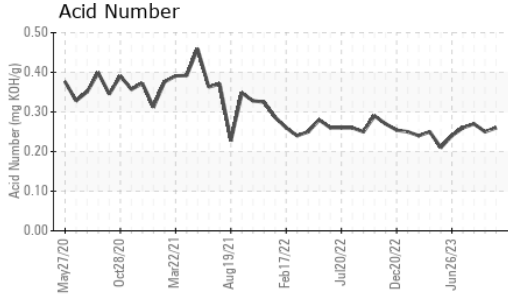
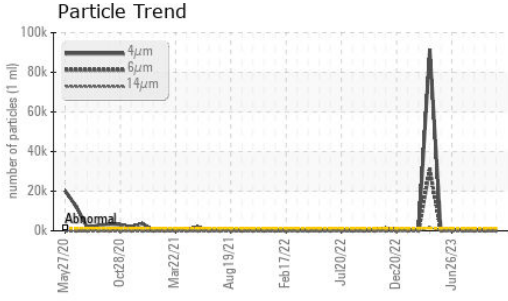
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>1300	354	243	504
Particles >6µm	ASTM D7647	>320	101	59	155
Particles >14µm	ASTM D7647	>40	8	6	19
Particles >21µm	ASTM D7647	>10	2	2	5
Particles >38µm	ASTM D7647	>3	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>17/15/12	16/14/10	15/13/10	16/14/11

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	0.25	0.27



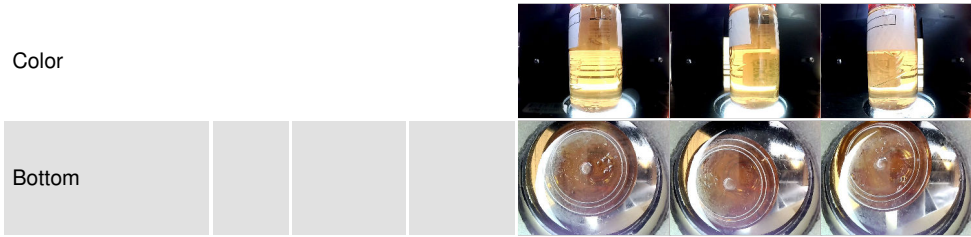
OIL ANALYSIS REPORT



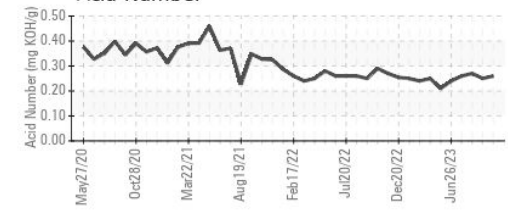
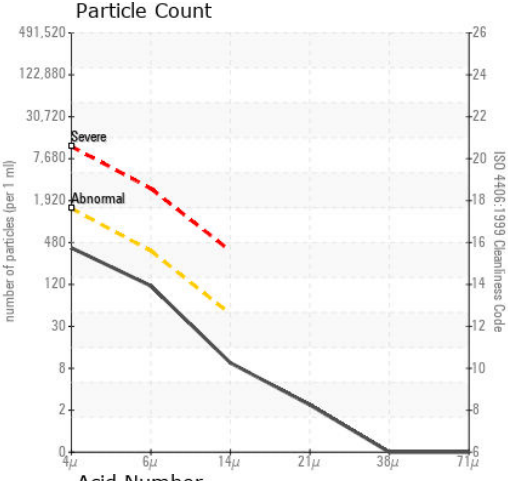
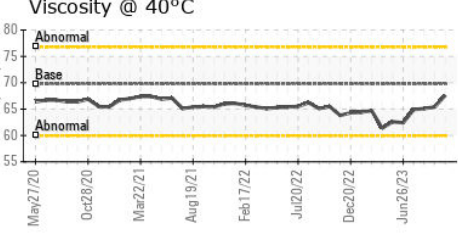
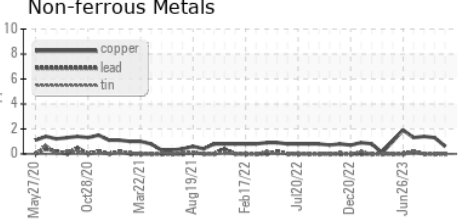
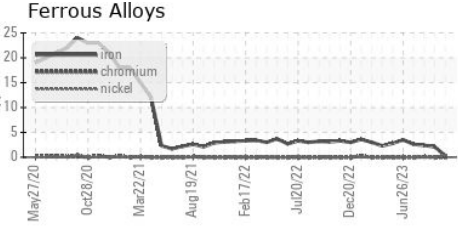
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	69.8	67.6	65.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0782933 **Received** : 16 Oct 2023
Lab Number : 05980364 **Diagnosed** : 17 Oct 2023
Unique Number : 10697659 **Diagnostician** : Wes Davis
Test Package : IND 2

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 US 24539
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 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)