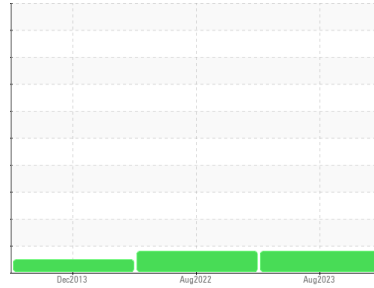




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
TK213050

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0664453	WC0664486	WCM2183681
Sample Date	Client Info		14 Aug 2023	14 Aug 2022	12 Dec 2013
Machine Age	days	Client Info	0	0	0
Oil Age	days	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	Not Changd
Sample Status			ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	6	6	14
Chromium	ppm	ASTM D5185m >10	<1	0	<1
Nickel	ppm	ASTM D5185m >10	0	0	<1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >10	<1	<1	<1
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >75	0	2	<1
Tin	ppm	ASTM D5185m >10	<1	0	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	2	5	1
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 5	2	4	2
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 25	14	13	4
Calcium	ppm	ASTM D5185m 200	132	134	130
Phosphorus	ppm	ASTM D5185m 300	306	312	377
Zinc	ppm	ASTM D5185m 370	380	392	430
Sulfur	ppm	ASTM D5185m 2500	3299	2895	2137

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<1	<1	1
Sodium	ppm	ASTM D5185m	<1	1	<1
Potassium	ppm	ASTM D5185m >20	<1	0	4

FLUID CLEANLINESS

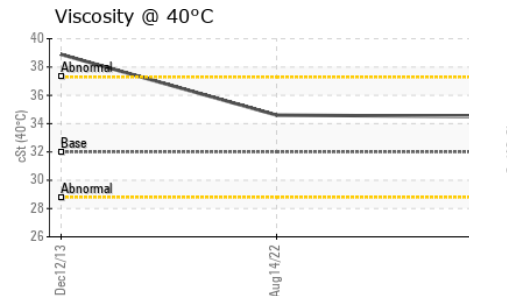
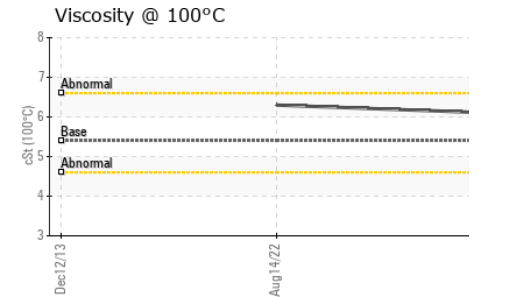
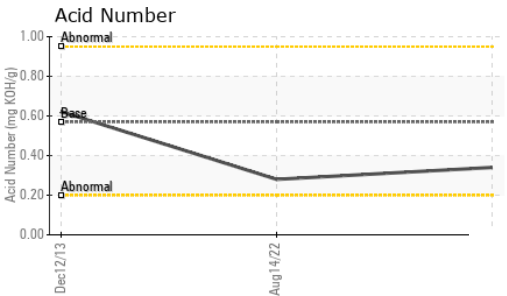
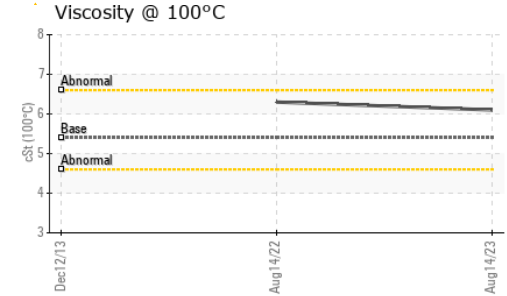
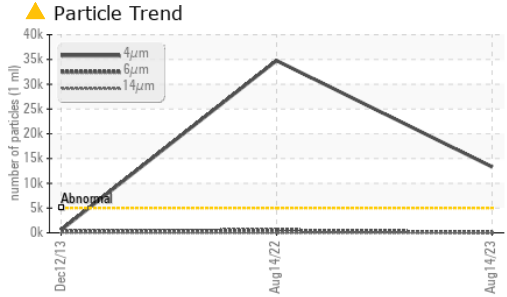
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 13312	▲ 34771	580
Particles >6µm	ASTM D7647	>1300	51	524	316
Particles >14µm	ASTM D7647	>160	5	18	53
Particles >21µm	ASTM D7647	>40	2	5	18
Particles >38µm	ASTM D7647	>10	0	0	2
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/13/10	▲ 22/16/11	16/15/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	0.34	0.28	0.622



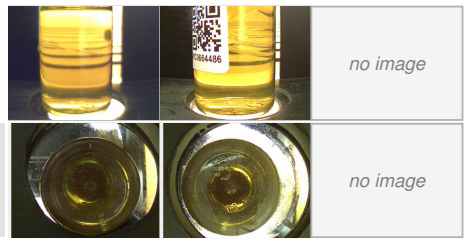
OIL ANALYSIS REPORT



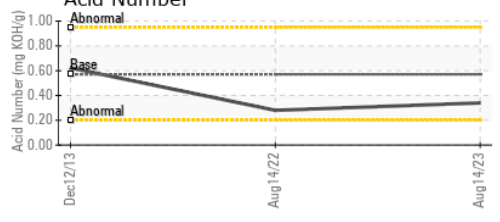
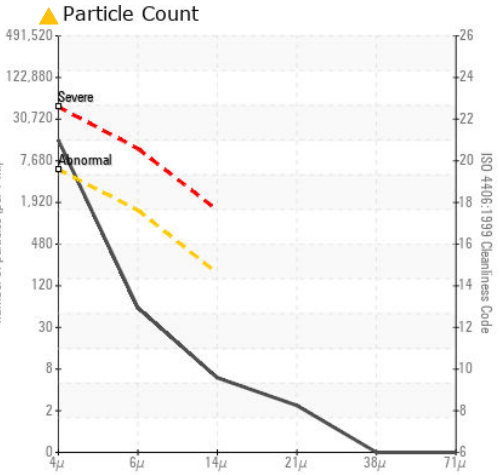
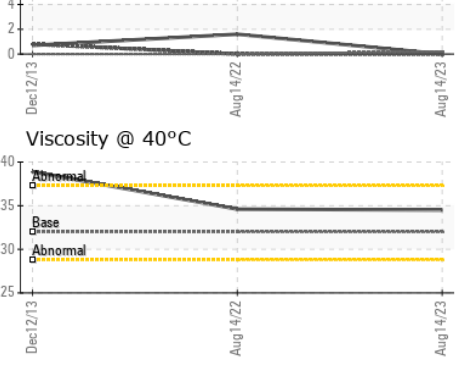
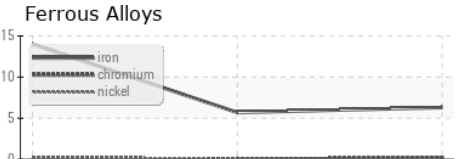
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	34.5	34.6
Visc @ 100°C	cSt	ASTM D445	5.4	6.1	6.3
Viscosity Index (VI)	Scale	ASTM D2270	102	124	133

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0664453 **Received** : 14 Aug 2023
Lab Number : 05924228 **Diagnosed** : 15 Aug 2023
Unique Number : 10604175 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: KV100, VI)

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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)