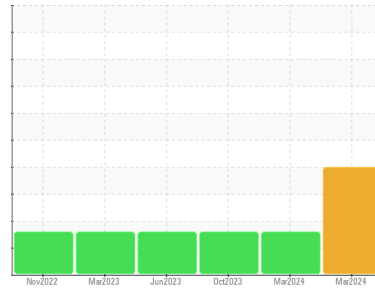




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
156-52-33-01 (S/N 1433)

Component
Hydraulic System

Fluid
ROYAL PURPLE SYNERGY 90/150 (1320 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Gear wear is indicated. Bearing and/or bushing wear is indicated.

Contamination

Elemental level of silicon (Si) above normal.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0822432	WC0878431	WC0822435
Sample Date	Client Info		31 Mar 2024	12 Mar 2024	21 Oct 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Filtered	Filtered	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	▲ 149	▲ 235	▲ 237
Chromium	ppm	ASTM D5185m >20	6	18	12
Nickel	ppm	ASTM D5185m >20	8	17	14
Titanium	ppm	ASTM D5185m	▲ 11	16	15
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	2	3	2
Lead	ppm	ASTM D5185m >20	<1	2	2
Copper	ppm	ASTM D5185m >20	▲ 60	▲ 68	▲ 66
Tin	ppm	ASTM D5185m >20	5	7	8
Vanadium	ppm	ASTM D5185m	<1	1	0
Cadmium	ppm	ASTM D5185m	1	2	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	1	0
Molybdenum	ppm	ASTM D5185m	<1	2	1
Manganese	ppm	ASTM D5185m	<1	2	2
Magnesium	ppm	ASTM D5185m	<1	2	2
Calcium	ppm	ASTM D5185m	6	11	8
Phosphorus	ppm	ASTM D5185m 200	491	402	305
Zinc	ppm	ASTM D5185m	11	23	25
Sulfur	ppm	ASTM D5185m	17041	16132	12378

CONTAMINANTS

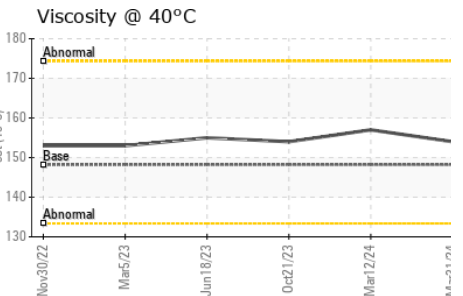
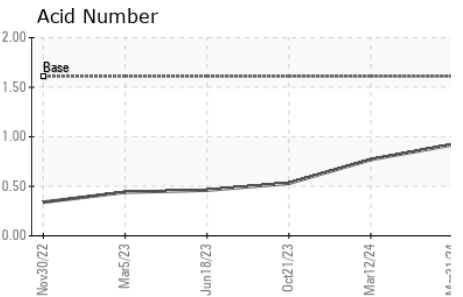
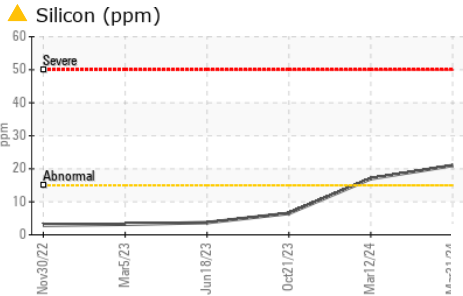
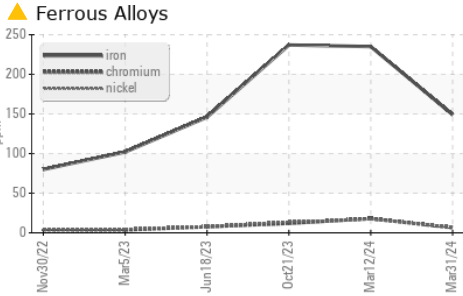
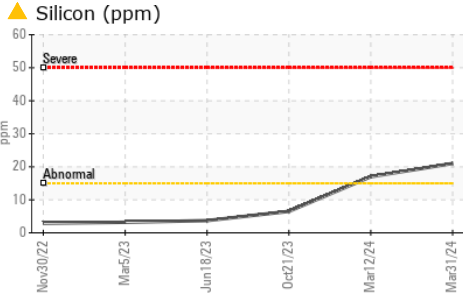
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	▲ 21	17	6
Sodium	ppm	ASTM D5185m	3	1	4
Potassium	ppm	ASTM D5185m >20	0	2	0

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.61	0.92	0.77	0.53



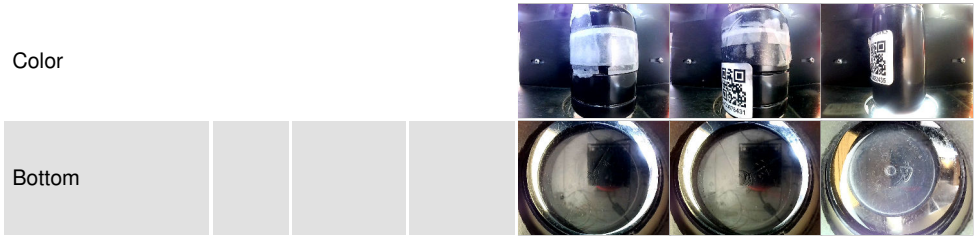
OIL ANALYSIS REPORT



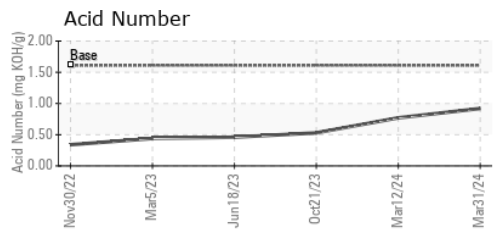
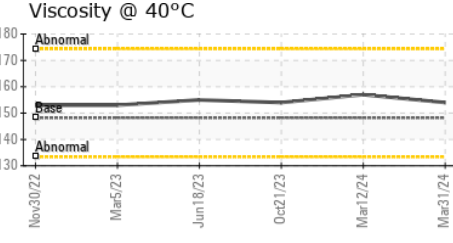
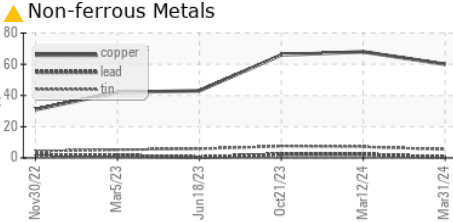
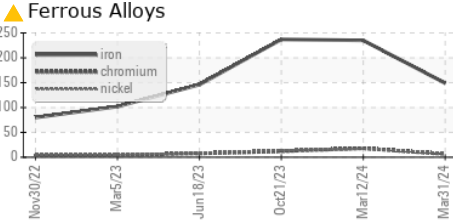
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	148.2	154	157

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0822432 **Received** : 03 Apr 2024
Lab Number : 06137588 **Tested** : 04 Apr 2024
Unique Number : 10957053 **Diagnosed** : 05 Apr 2024 - Don Baldrige
Test Package : IND 2

ATI SPECIALTY MATERIALS - MELT & REMELT
 2020 ASHCRAFT AVE
 MONROE, NC
 US 28111
 Contact: JOEL WRIGHT
 joel.wright@atimetals.com
 T: (704)289-4511
 F: (704)282-0665

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)