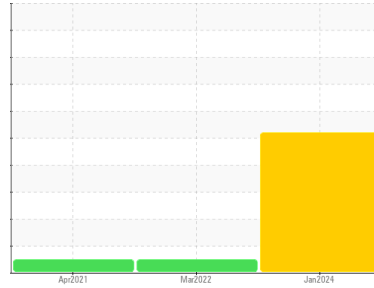




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
CR6624

Component
2 Winch

Fluid
GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Appearance is unacceptable Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil.

Fluid Condition

The oil viscosity is higher than normal.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0867443	WC0671373	WC0534197
Sample Date	Client Info		03 Jan 2024	31 Mar 2022	10 Apr 2021
Machine Age	hrs	Client Info	11375	9361	8512
Oil Age	hrs	Client Info	0	0	8512
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	26	5	0
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >10	0	0	<1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >5	▲ 16	2	0
Lead	ppm	ASTM D5185m >15	0	0	<1
Copper	ppm	ASTM D5185m >80	<1	<1	0
Tin	ppm	ASTM D5185m	0	0	<1
Antimony	ppm	ASTM D5185m >5	---	---	<1
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 50	13	<1	2
Barium	ppm	ASTM D5185m 15	0	0	0
Molybdenum	ppm	ASTM D5185m 15	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 50	2	0	<1
Calcium	ppm	ASTM D5185m 50	2	1	0
Phosphorus	ppm	ASTM D5185m 350	465	239	349
Zinc	ppm	ASTM D5185m 100	2	7	0
Sulfur	ppm	ASTM D5185m 12500	6208	468	33

CONTAMINANTS

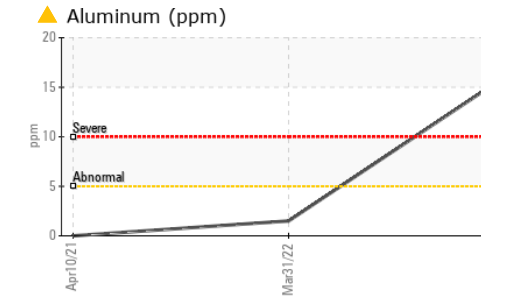
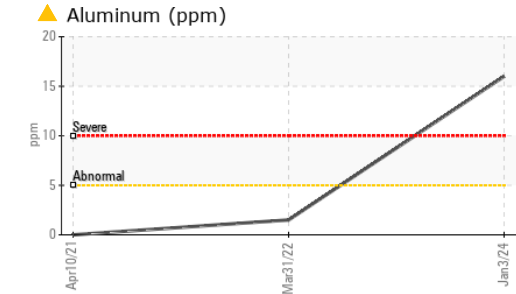
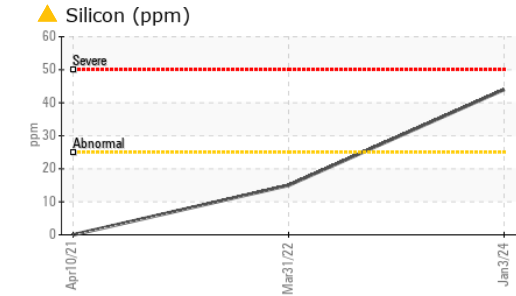
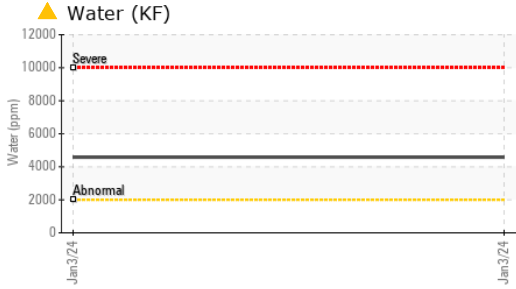
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	▲ 44	15	0
Sodium	ppm	ASTM D5185m	<1	<1	0
Potassium	ppm	ASTM D5185m >20	6	0	1
Water	%	ASTM D6304 >0.2	▲ 0.458	---	---
ppm Water	ppm	ASTM D6304 >2000	▲ 4580	---	---

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	VLITE	MODER
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	MODER	NONE	NONE
Debris	scalar	*Visual NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	▲ HAZY	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.2	0.2%	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG



OIL ANALYSIS REPORT

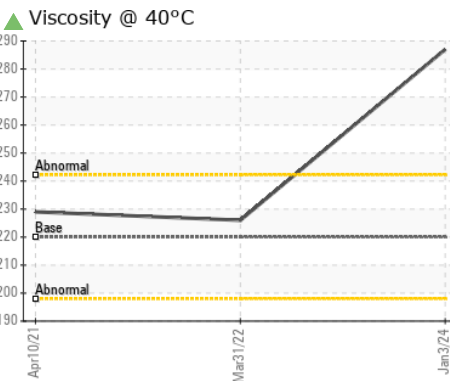
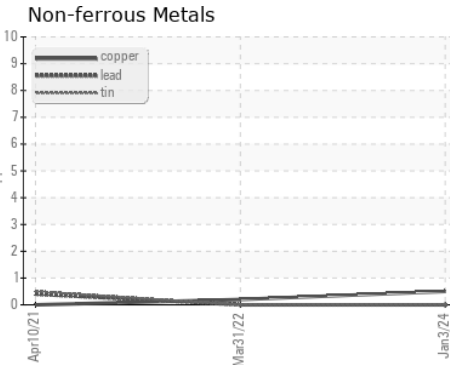
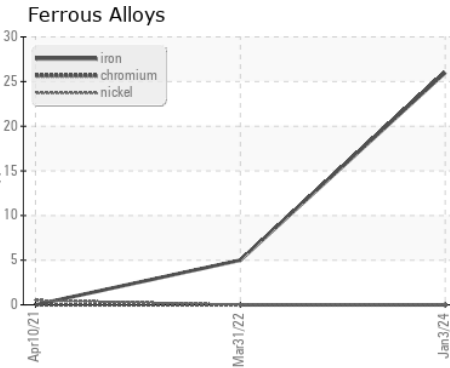


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220 ▲ 287	226	229

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0867443 **Received** : 12 Jan 2024
Lab Number : 06060492 **Diagnosed** : 16 Jan 2024
Unique Number : 10831874 **Diagnostician** : Sean Felton
Test Package : CONST (Additional Tests: KF)

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)

BUCKNER - WILLIS
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 US 77378

Contact: JOHN HAWKINS
johnh@bucknercompanies.com

T:
F: