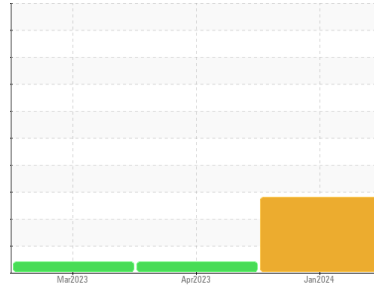




# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Machine Id  
**CR3316**

Component  
**1 Winch**

Fluid  
**GEAR OIL ISO 220 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### ▲ Wear

The iron level is abnormal. All other component wear rates are normal.

### ▲ Contamination

There is no indication of any contamination in the oil.

### ▲ Fluid Condition

The oil viscosity is higher than normal. Confirm oil type.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0873412</b>	WC0809353	WC0785061
Sample Date	Client Info		<b>20 Jan 2024</b>	19 Apr 2023	03 Mar 2023
Machine Age	hrs	Client Info	<b>10428</b>	9481	9250
Oil Age	hrs	Client Info	<b>947</b>	1000	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status			<b>ABNORMAL</b>	ATTENTION	ATTENTION

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	<b>▲ 376</b>	38	31
Chromium	ppm	ASTM D5185m >10	<b>3</b>	<1	<1
Nickel	ppm	ASTM D5185m >10	<b>2</b>	0	5
Titanium	ppm	ASTM D5185m	<b>3</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >5	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >80	<b>4</b>	1	3
Tin	ppm	ASTM D5185m	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>75</b>	196	156
Barium	ppm	ASTM D5185m 15	<b>6</b>	0	0
Molybdenum	ppm	ASTM D5185m 15	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>4</b>	1	<1
Magnesium	ppm	ASTM D5185m 50	<b>13</b>	11	8
Calcium	ppm	ASTM D5185m 50	<b>115</b>	25	43
Phosphorus	ppm	ASTM D5185m 350	<b>536</b>	1294	1241
Zinc	ppm	ASTM D5185m 100	<b>120</b>	65	100
Sulfur	ppm	ASTM D5185m 12500	<b>4017</b>	27370	23040

## CONTAMINANTS

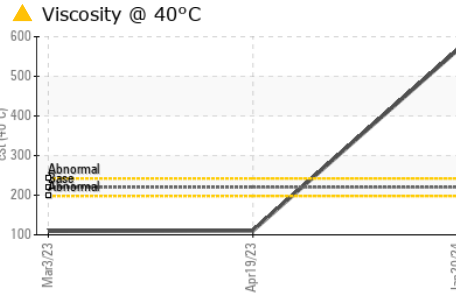
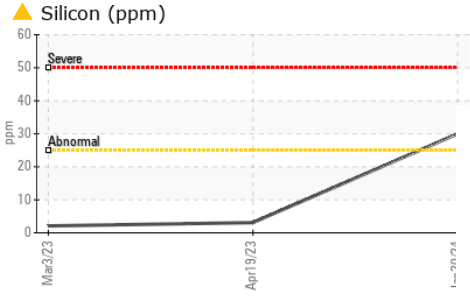
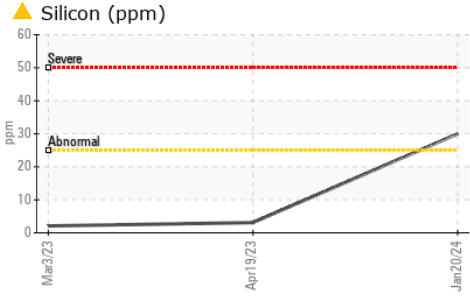
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>▲ 30</b>	3	2
Sodium	ppm	ASTM D5185m	<b>16</b>	2	0
Potassium	ppm	ASTM D5185m >20	<b>13</b>	0	1

## VISUAL

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



# OIL ANALYSIS REPORT

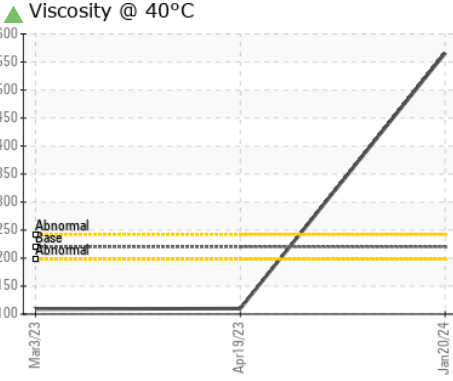
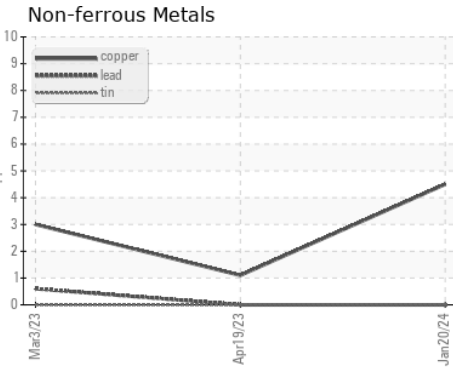
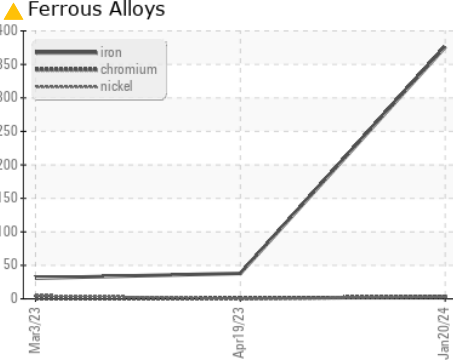


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 220	▲ 566	▲ 110	▲ 109

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.** : WC0873412      **Received** : 30 Jan 2024  
**Lab Number** : 06074232      **Tested** : 31 Jan 2024  
**Unique Number** : 10856323      **Diagnosed** : 31 Jan 2024 - Jonathan Hester  
**Test Package** : CONST

**BUCKNER HEAVY LIFT**  
 4732 NC 54 EAST  
 GRAHAM, NC  
 US 27253-9215  
 Contact: MICHAEL LAWSON  
 michael@bucknercompanies.com  
 T: (336)376-8888  
 F: (336)376-4090

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)