



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**CR3312**  
Component  
**Rear Winch**  
Fluid  
**GEAR OIL ISO 220 (--- GAL)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0935908</b>	WC0751862	---
Sample Date		Client Info		<b>13 Jun 2024</b>	14 Jan 2023	---
Machine Age	hrs	Client Info		<b>11130</b>	8553	---
Oil Age	hrs	Client Info		<b>1000</b>	1000	---
Filter Age	hrs	Client Info		<b>0</b>	1000	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ATTENTION	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>89</b>	20	---
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	<1	---
Nickel	ppm	ASTM D5185m	>10	<b>1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>5	<b>4</b>	0	---
Lead	ppm	ASTM D5185m	>15	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>80	<b>3</b>	<1	---
Tin	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

There is no indication of any contamination in the oil.

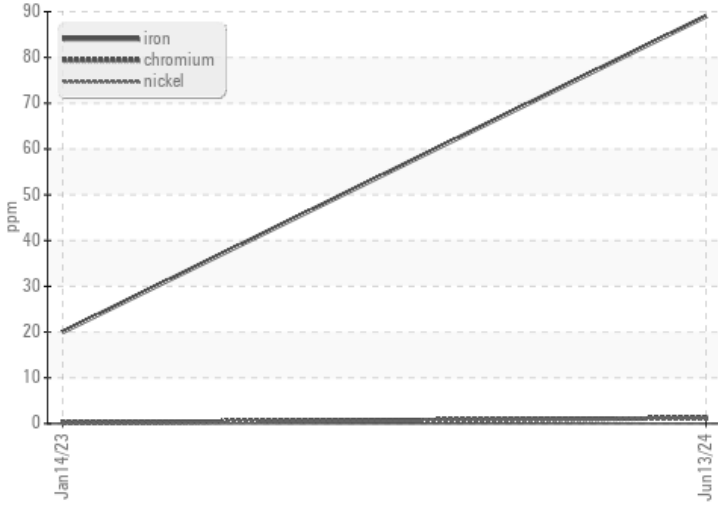
Silicon	ppm	ASTM D5185m	>25	<b>15</b>	3	---
Potassium	ppm	ASTM D5185m	>20	<b>14</b>	2	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

## FLUID CONDITION

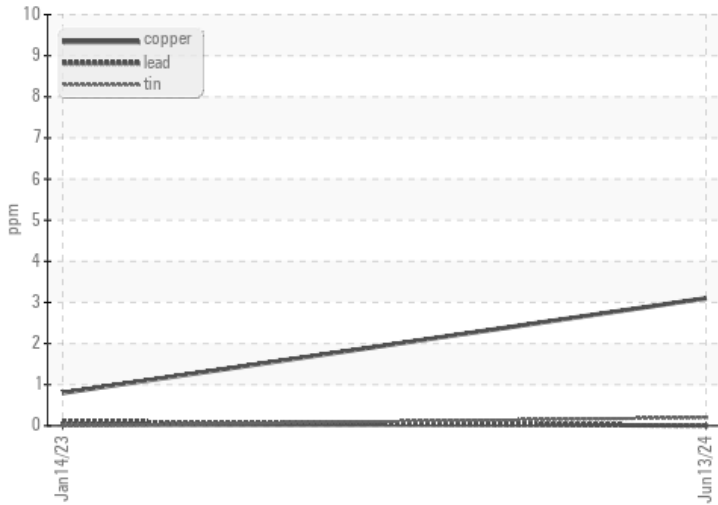
The oil viscosity is higher than normal.

Sodium	ppm	ASTM D5185m		<b>10</b>	0	---
Boron	ppm	ASTM D5185m	50	<b>25</b>	100	---
Barium	ppm	ASTM D5185m	15	<b>5</b>	0	---
Molybdenum	ppm	ASTM D5185m	15	<b>0</b>	1	---
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	---
Magnesium	ppm	ASTM D5185m	50	<b>6</b>	9	---
Calcium	ppm	ASTM D5185m	50	<b>151</b>	71	---
Phosphorus	ppm	ASTM D5185m	350	<b>506</b>	635	---
Zinc	ppm	ASTM D5185m	100	<b>45</b>	40	---
Sulfur	ppm	ASTM D5185m	12500	<b>9204</b>	15267	---

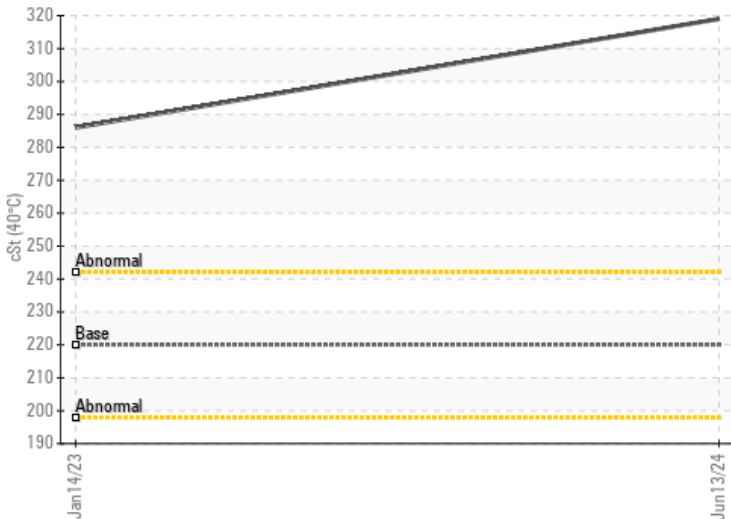
### Ferrous Alloys



### Non-ferrous Metals



### Viscosity @ 40°C



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0935908  
**Lab Number** : 06212656  
**Unique Number** : 11085520  
**Test Package** : CONST

**Received** : 17 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Angela Borella

**BUCKNER HEAVY LIFT**  
 4732 NC 54 EAST  
 GRAHAM, NC  
 US 27253-9215

Contact: MICHAEL LAWSON  
 michael@bucknercompanies.com

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)

T: (336)376-8888  
 F: (336)376-4090