



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HC2220
Component
2 Winch
Fluid
GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0823389	WC0746552	WC0671518
Sample Date		Client Info		08 Apr 2024	25 Jan 2023	04 Apr 2022
Machine Age	hrs	Client Info		3010	1235	677
Oil Age	hrs	Client Info		1000	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	112	10	31
Chromium	ppm	ASTM D5185m	>10	2	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>5	3	0	<1
Lead	ppm	ASTM D5185m	>15	<1	0	2
Copper	ppm	ASTM D5185m	>80	1	0	2
Tin	ppm	ASTM D5185m		<1	0	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

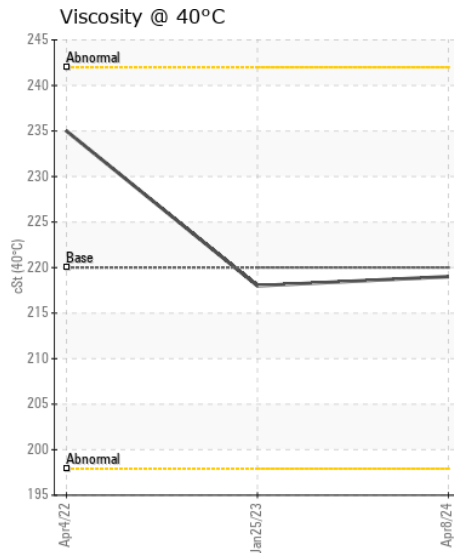
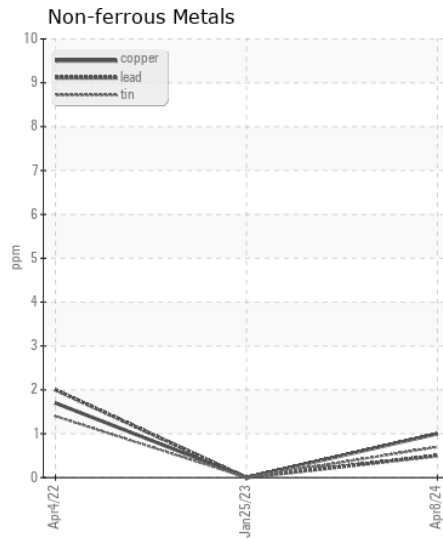
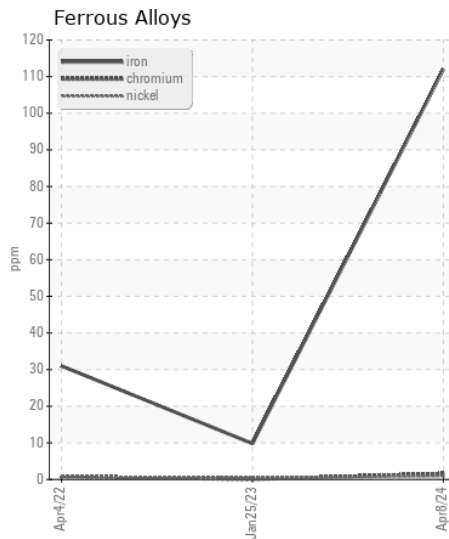
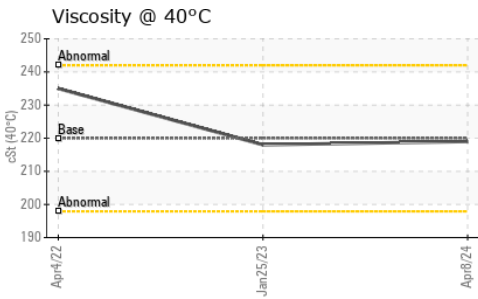
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	1	2
Potassium	ppm	ASTM D5185m	>20	2	2	8
Water		WC Method	>0.2	NEG	NEG	NEG
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	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	▲ 0.2%

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		4	<1	6
Boron	ppm	ASTM D5185m	50	0	0	15
Barium	ppm	ASTM D5185m	15	1	0	<1
Molybdenum	ppm	ASTM D5185m	15	<1	0	<1
Manganese	ppm	ASTM D5185m		4	<1	2
Magnesium	ppm	ASTM D5185m	50	2	<1	11
Calcium	ppm	ASTM D5185m	50	15	5	15
Phosphorus	ppm	ASTM D5185m	350	350	269	73
Zinc	ppm	ASTM D5185m	100	23	13	28
Sulfur	ppm	ASTM D5185m	12500	3538	4292	2232
Visc @ 40°C	cSt	ASTM D445	220	219	218	235



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0823389
Lab Number : 06149122
Unique Number : 10979200
Test Package : CONST

Received : 15 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 17 Apr 2024 - Sean Felton

BUCKNER HEAVY LIFT
 4732 NC 54 EAST
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 US 27253-9215

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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)