

WEARSEVERECONTAMINATIONNORMALFLUID CONDITIONNORMAL

Machine Id HC2215 Component 2 Winch Fluid GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

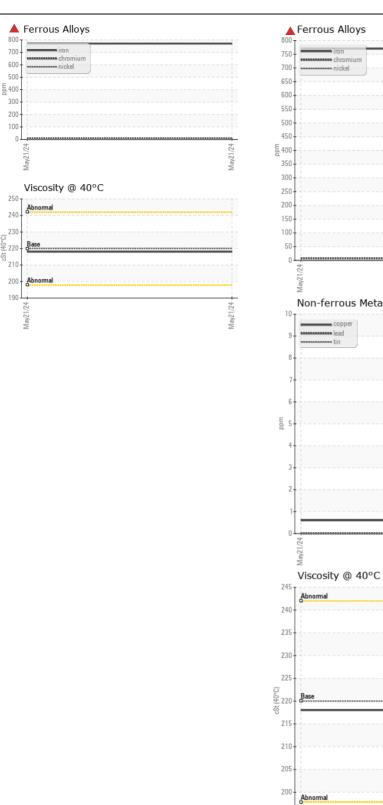
There is no indication of any contamination in the oil.

FLUID CONDITION

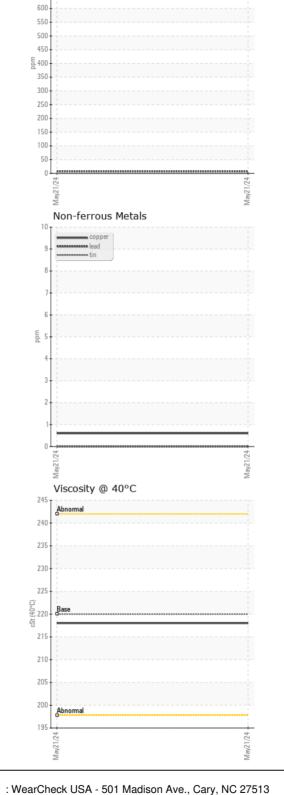
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0935883		
Sample Date		Client Info		21 May 2024		
Machine Age	hrs	Client Info		12325		
Oil Age	hrs	Client Info		1802		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Not Changd		
Sample Status				SEVERE		
Iron	ppm	ASTM D5185m	>150	770		
Chromium	ppm	ASTM D5185m	>10	8		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>5	5		
Lead	ppm	ASTM D5185m	>15	0		
Copper	ppm	ASTM D5185m	>80	<1		
Tin	ppm	ASTM D5185m		0		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	8		
Potassium	ppm	ASTM D5185m	>20	0		
Water		WC Method	>0.2	NEG		
Silt	scalar	*Visual	NONE	MODER		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	HAZY		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Sodium	ppm	ASTM D5185m		0		
Boron	ppm	ASTM D5185m	50	0		
Barium	ppm	ASTM D5185m	15	0		
Molybdenum	ppm	ASTM D5185m	15	2		
Manganese	ppm	ASTM D5185m		7		
Magnesium	ppm	ASTM D5185m	50	0		
Calcium	ppm	ASTM D5185m	50	<1		
Phosphorus	ppm	ASTM D5185m	350	323		
Zinc	ppm	ASTM D5185m	100	15		
Sulfur	ppm	ASTM D5185m	12500	5618		
Visc @ 40°C	cSt	ASTM D445	220	218		

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cSt (40°C)

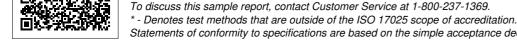


Received

Diagnosed

Tested

BUCKNER HEAVY LIFT : 24 May 2024 4732 NC 54 EAST GRAHAM, NC : 28 May 2024 : 29 May 2024 - Sean Felton US 27253-9215 Contact: MICHAEL LAWSON michaell@bucknercompanies.com T: (336)376-8888 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (336)376-4090



Certificate L2367

Laboratory

Sample No.

Lab Number : 06191375

Unique Number : 11048127

Test Package : CONST

: WC0935883

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