

## **OIL ANALYSIS REPORT**

Sample Rating Trend

WEAR

## Machine Id CR1216 Component

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

Gear wear is indicated.

#### Contamination

There is no indication of any contamination in the oil.

## Fluid Condition

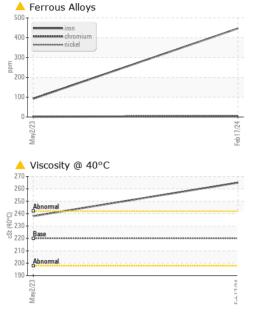
The oil viscosity is higher than normal.

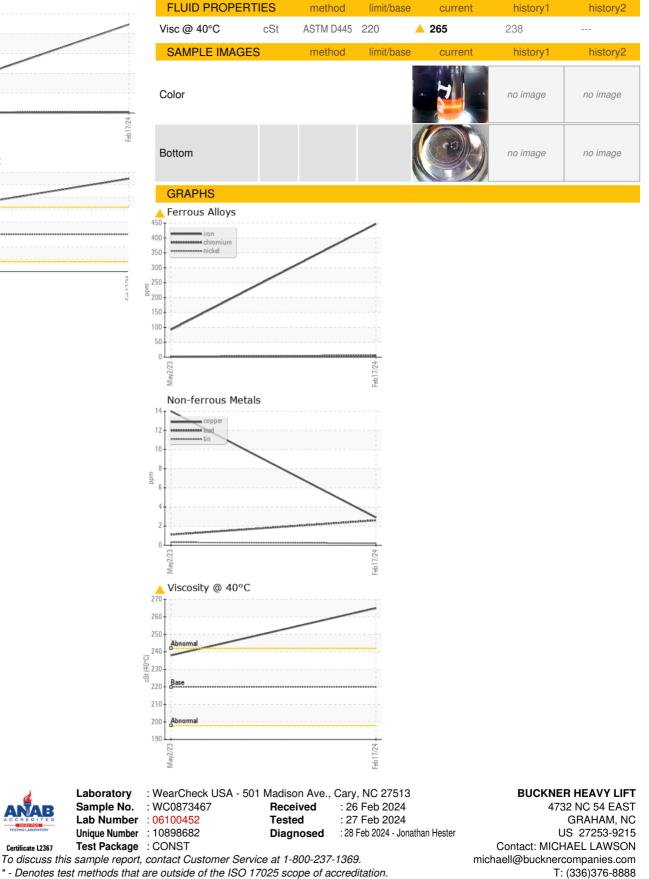
			May2023	Feb2024		
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0873467	WC0809254	
Sample Date		Client Info		17 Feb 2024	02 May 2023	
Machine Age	hrs	Client Info		3481	2737	
Oil Age	hrs	Client Info		0	763	
Oil Changed	1115	Client Info		0 Changed	Changed	
Sample Status		Chefit IIIIO		ABNORMAL	NORMAL	
	J	method	limit/base	current	history1	history2
Water	•	WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	447	92	
Chromium	ppm	ASTM D5185m		5	1	
Nickel	ppm	ASTM D5185m		ر 1	<1	
Titanium		ASTM D5185m	210	<1	0	
	ppm	ASTM D5185m		<1 0	0	
Silver	ppm		-			
Aluminum	ppm	ASTM D5185m		3	<1	
_ead	ppm		>15	3	1	
Copper	ppm	ASTM D5185m	>80	3	14	
Tin	ppm	ASTM D5185m		<1	<1	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	0	19	
Barium	ppm	ASTM D5185m	15	1	0	
Volybdenum	ppm	ASTM D5185m	15	<1	<1	
Vanganese	ppm	ASTM D5185m		4	<1	
Magnesium	ppm	ASTM D5185m	50	<1	<1	
Calcium	ppm	ASTM D5185m	50	20	14	
Phosphorus	ppm	ASTM D5185m	350	310	13	
Zinc	ppm	ASTM D5185m	100	64	39	
Sulfur	ppm	ASTM D5185m	12500	3838	4083	
CONTAMINANTS						
		method	limit/base	current		history2
	nom	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		5	history1 2	
Silicon Sodium	ppm	ASTM D5185m ASTM D5185m	>25	5 4	history1 2 8	history2  
Silicon Sodium Potassium		ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20	5 4 5	history1 2 8 6	
Silicon Sodium Potassium VISUAL	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	>25 >20 limit/base	5 4 5 current	history1 2 8 6 history1	  history2
Silicon Sodium Potassium VISUAL White Metal	ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>25 >20 limit/base NONE	5 4 5 current NONE	history1 2 8 6 history1 NONE	  history2
Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> *Visual *Visual	>25 >20 limit/base NONE NONE	5 4 5 current NONE NONE	history1 2 8 6 history1 NONE NONE	  history2 
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> *Visual *Visual *Visual	>25 >20 limit/base NONE NONE NONE	5 4 5 current NONE NONE NONE	history1 2 8 6 history1 NONE NONE NONE	  history2
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>25 >20 limit/base NONE NONE NONE NONE	5 4 5 current NONE NONE NONE MODER	history1 2 8 6 history1 NONE NONE NONE NONE	 history2  
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>25 >20 limit/base NONE NONE NONE NONE NONE	5 4 5 Current NONE NONE NONE MODER NONE	history1 2 8 6 NONE NONE NONE NONE NONE NONE	  history2 
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>25 >20 limit/base NONE NONE NONE NONE NONE	5 4 5 current NONE NONE NONE NONE NONE NONE	history1 2 8 6 NONE NONE NONE NONE NONE NONE NONE	 history2  
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>25 Jimit/base NONE NONE NONE NONE NONE NONE NONE NON	5 4 5 Current NONE NONE NONE NONE NONE NONE NORML	history1 2 8 6 history1 NONE NONE NONE NONE NONE NONE NONE NON	 history2   
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>25 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	5 4 5 current NONE NONE NONE NONE NONE NONE	history1 2 8 6 NONE NONE NONE NONE NONE NONE NONE	 history2     
Silicon Sodium Potassium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>25 Jimit/base NONE NONE NONE NONE NONE NONE NONE NON	5 4 5 Current NONE NONE NONE NONE NONE NONE NORML	history1 2 8 6 history1 NONE NONE NONE NONE NONE NONE NONE NON	 history2     

Contact/Location: MICHAEL LAWSON - BUCGRA



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\* - 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)

Certificate L2367

Laboratory

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