



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**HC2209**  
Component  
**1 Winch**  
Fluid  
**GEAR OIL ISO 220 (--- GAL)**

## RECOMMENDATION

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

## WEAR

All component wear rates are normal.

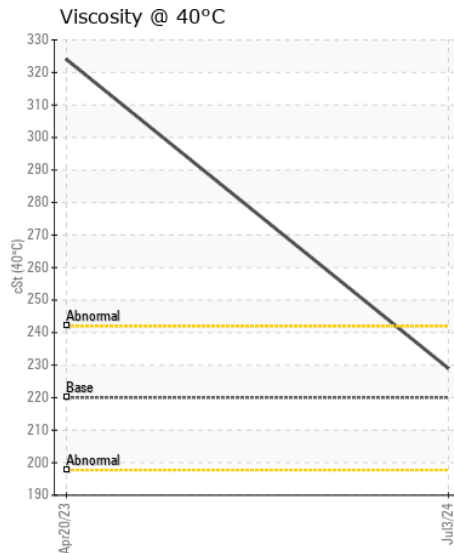
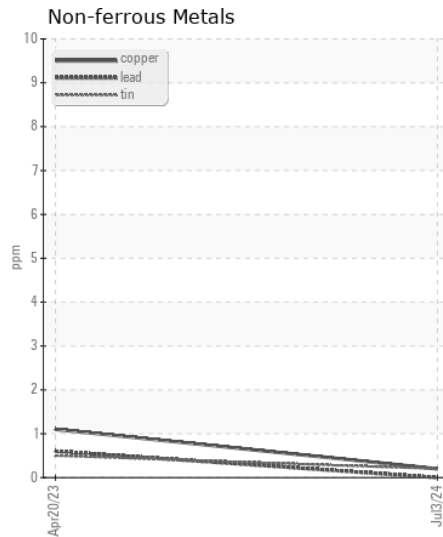
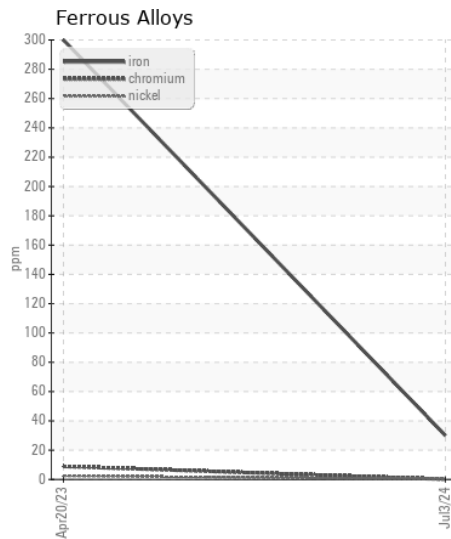
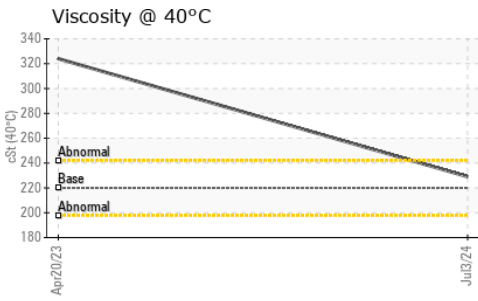
## CONTAMINATION

There is no indication of any contamination in the oil. Sample is layered with different type/density oil.

## FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0951925	WC0784996	---
Sample Date		Client Info		03 Jul 2024	20 Apr 2023	---
Machine Age	hrs	Client Info		10485	8992	---
Oil Age	hrs	Client Info		1000	1340	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185m	>150	30	▲ 300	---
Chromium	ppm	ASTM D5185m	>10	<1	9	---
Nickel	ppm	ASTM D5185m	>10	<1	2	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>5	<1	7	---
Lead	ppm	ASTM D5185m	>15	0	<1	---
Copper	ppm	ASTM D5185m	>80	<1	1	---
Tin	ppm	ASTM D5185m		<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	1	14	---
Potassium	ppm	ASTM D5185m	>20	3	5	---
Water	%	ASTM D6304	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	● SOLID	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m		2	11	---
Boron	ppm	ASTM D5185m	50	2	2	---
Barium	ppm	ASTM D5185m	15	0	0	---
Molybdenum	ppm	ASTM D5185m	15	0	<1	---
Manganese	ppm	ASTM D5185m		<1	4	---
Magnesium	ppm	ASTM D5185m	50	2	2	---
Calcium	ppm	ASTM D5185m	50	6	35	---
Phosphorus	ppm	ASTM D5185m	350	367	420	---
Zinc	ppm	ASTM D5185m	100	54	205	---
Sulfur	ppm	ASTM D5185m	12500	7294	7735	---
Visc @ 40°C	cSt	ASTM D445	220	229	● 324	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0951925 **Received** : 09 Jul 2024  
**Lab Number** : 06231802 **Tested** : 11 Jul 2024  
**Unique Number** : 11115295 **Diagnosed** : 11 Jul 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: KF )

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)

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