



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
HC2229

Component
2 Winch

Fluid
GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. 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.

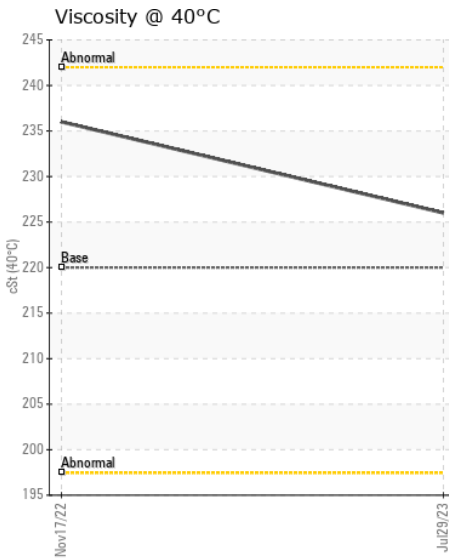
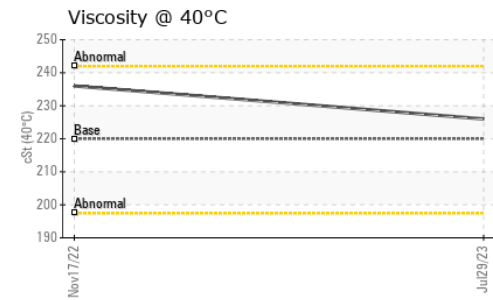
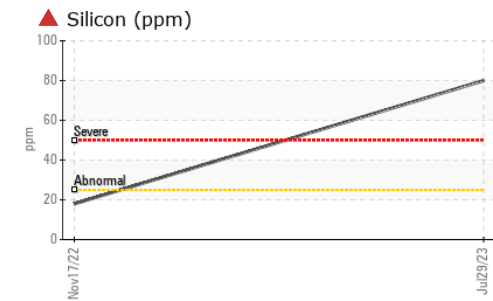
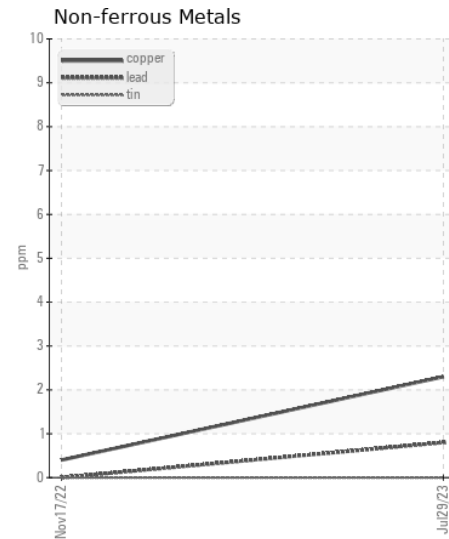
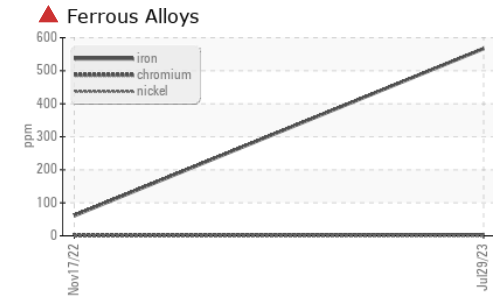
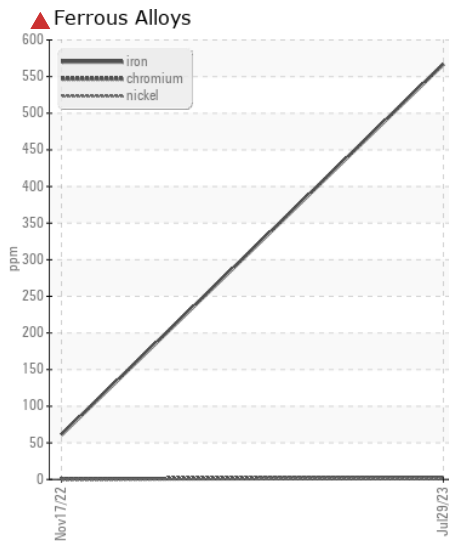
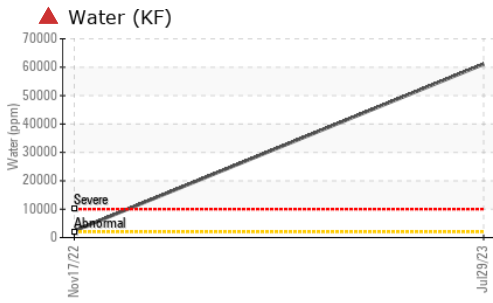
CONTAMINATION

Elemental level of silicon (Si) above normal. There is a high concentration of water present in the oil.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0810378	WC0720449	---
Sample Date		Client Info		29 Jul 2023	17 Nov 2022	---
Machine Age	hrs	Client Info		6455	5125	---
Oil Age	hrs	Client Info		0	717	---
Filter Age	hrs	Client Info		0	717	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				SEVERE	ABNORMAL	---
Iron	ppm	ASTM D5185m	>150	▲ 567	61	---
Chromium	ppm	ASTM D5185m	>10	3	<1	---
Nickel	ppm	ASTM D5185m	>10	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	1	---
Aluminum	ppm	ASTM D5185m	>5	2	1	---
Lead	ppm	ASTM D5185m	>15	<1	0	---
Copper	ppm	ASTM D5185m	>80	2	<1	---
Tin	ppm	ASTM D5185m		0	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	▲ 80	18	---
Potassium	ppm	ASTM D5185m	>20	3	<1	---
Water	%	ASTM D6304	>0.2	▲ 6.11	▲ 0.235	---
ppm Water	ppm	ASTM D6304	>2000	▲ 61100	▲ 2350	---
Silt	scalar	*Visual	NONE	NONE	MODER	---
Debris	scalar	*Visual	NONE	LIGHT	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	● SOLID	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	0.2%	---
Sodium	ppm	ASTM D5185m		3	0	---
Boron	ppm	ASTM D5185m	50	0	<1	---
Barium	ppm	ASTM D5185m	15	0	0	---
Molybdenum	ppm	ASTM D5185m	15	<1	0	---
Manganese	ppm	ASTM D5185m		7	1	---
Magnesium	ppm	ASTM D5185m	50	2	<1	---
Calcium	ppm	ASTM D5185m	50	8	38	---
Phosphorus	ppm	ASTM D5185m	350	388	248	---
Zinc	ppm	ASTM D5185m	100	53	26	---
Sulfur	ppm	ASTM D5185m	12500	2013	1132	---
Visc @ 40°C	cSt	ASTM D445	220	226	236	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0810378 **Received** : 15 Aug 2023
Lab Number : 05925582 **Tested** : 17 Aug 2023
Unique Number : 10605529 **Diagnosed** : 17 Aug 2023 - Don Baldrige
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)

BUCKNER HEAVY LIFT

4732 NC 54 EAST
GRAHAM, NC
US 27253-9215

Contact: MICHAEL LAWSON
michaell@bucknercompanies.com

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