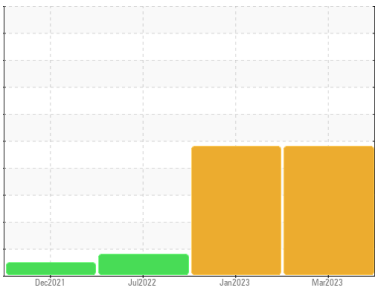
PROBLEM SUMMARY

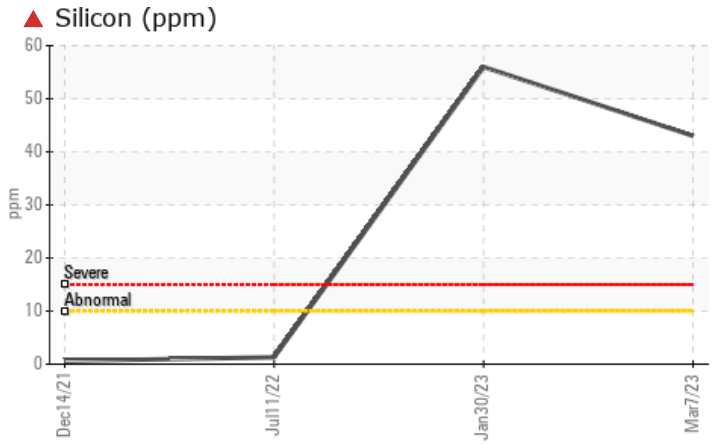
Sample Rating Trend



DIRT

Machine Id
PORT STEERING (S/N 115841-080001)
Component
Port Steering
Fluid
CASTROL HYSPIN AWH-M ISO 32 (800 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Check seals and/or filters for points of contaminant entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 2 test kits, this testkit includes AN to determine the suitability of the fluid for continued use. this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	ATTENTION
Silicon	ppm	ASTM D5185(m)	>10	▲ 43	▲ 56	1

Customer Id: HORIZONKJG
Sample No.: WC0787170
Lab Number: 02546010
Test Package: MAR 1

To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	MISSED	Jan 26 2024	?	We recommend an early resample to monitor this condition.
Contact Required	---	---	?	Please contact your representative for information regarding the proper sampling kits for your service.
Alert	MISSED	Jan 26 2024	?	NOTE: We recommend using MAR 2 test kits,
Information Required	MISSED	Jan 26 2024	?	Please specify the component make and model with your next sample.
Check Seals	MISSED	Jan 26 2024	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

DIRT

30 Jan 2023 Diag: Kevin Marson

Check seals and/or filters for points of contaminant entry. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 2 test kits, this testkit includes AN to determine the suitability of the fluid for continued use. this testkit includes Particle Count to determine the ISO cleanliness of the fluid.All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. The fluid is no longer serviceable due to the presence of contaminants.

view report

WEAR

11 Jul 2022 Diag: Kevin Marson

No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 2 test kits, this testkit includes AN to determine the suitability of the fluid for continued use. this testkit includes Particle Count to determine the ISO cleanliness of the fluid.Lead ppm levels are noted. All other component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service (unconfirmed).

view report

NORMAL

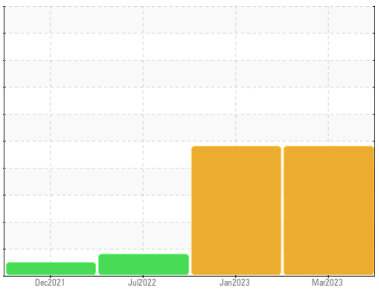
14 Dec 2021 Diag: Wes Davis

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 2 test kits, this testkit includes AN to determine the suitability of the fluid for continued use.All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service (unconfirmed).

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Machine Id
PORT STEERING (S/N 115841-080001)
Component
Port Steering
Fluid
CASTROL HYSPIN AWH-M ISO 32 (800 LTR)

DIAGNOSIS

▲ Recommendation
Check seals and/or filters for points of contaminant entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 2 test kits, this testkit includes AN to determine the suitability of the fluid for continued use. this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

Wear
All component wear rates are normal.

▲ Contamination
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Fluid Condition
The fluid is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0787170**	WC0474211	WC0474242
Sample Date		Client Info		**07 Mar 2023**	30 Jan 2023	11 Jul 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**1**	0	0
Oil Changed		Client Info		**Changed**	N/A	Not Changd
Sample Status				**SEVERE**	SEVERE	ATTENTION

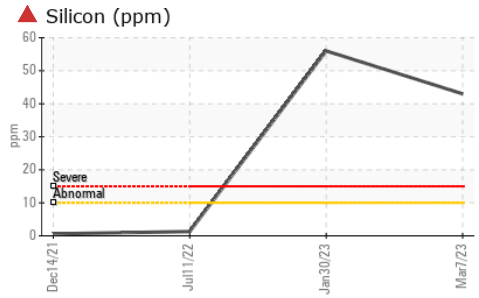
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method		**NEG**	NEG	NEG

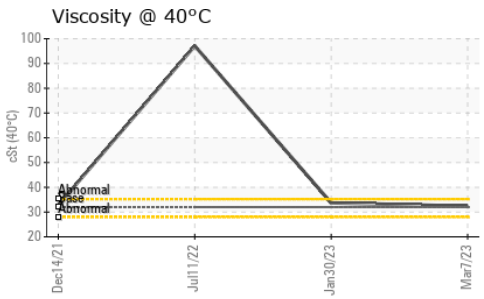
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>60	**2**	3	46
Chromium	ppm	ASTM D5185(m)	>12	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>6	**0**	0	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>4	**<1**	0	<1
Lead	ppm	ASTM D5185(m)	>12	**<1**	<1	15
Copper	ppm	ASTM D5185(m)	>30	**<1**	<1	3
Tin	ppm	ASTM D5185(m)		**0**	0	<1
Antimony	ppm	ASTM D5185(m)		**<1**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**<1**	<1	2
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	<1
Magnesium	ppm	ASTM D5185(m)		**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)		**49**	43	3
Phosphorus	ppm	ASTM D5185(m)		**415**	409	493
Zinc	ppm	ASTM D5185(m)		**450**	455	14
Sulfur	ppm	ASTM D5185(m)		**3786**	4294	9978
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>10	▲ **43**	▲ 56	1
Sodium	ppm	ASTM D5185(m)		**<1**	0	1
Potassium	ppm	ASTM D5185(m)	>20	**1**	<1	0

OIL ANALYSIS REPORT



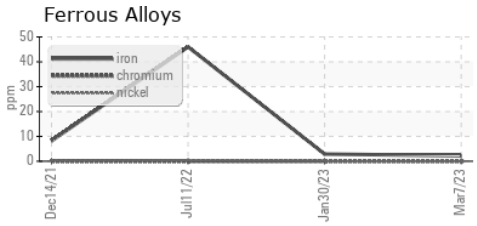


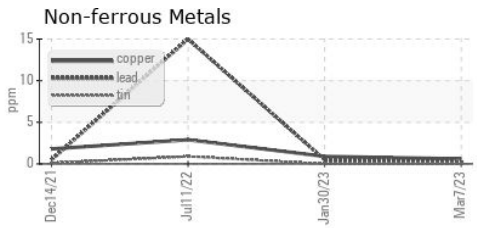
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*		**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

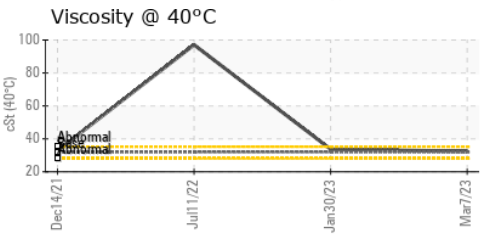
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32.0	**32.4**	33.7	97.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS







ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0787170
Lab Number : 02546010
Unique Number : 5551020
Test Package : MAR 1

Received : 17 Mar 2023
Tested : 17 Mar 2023
Diagnosed : 17 Mar 2023 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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