

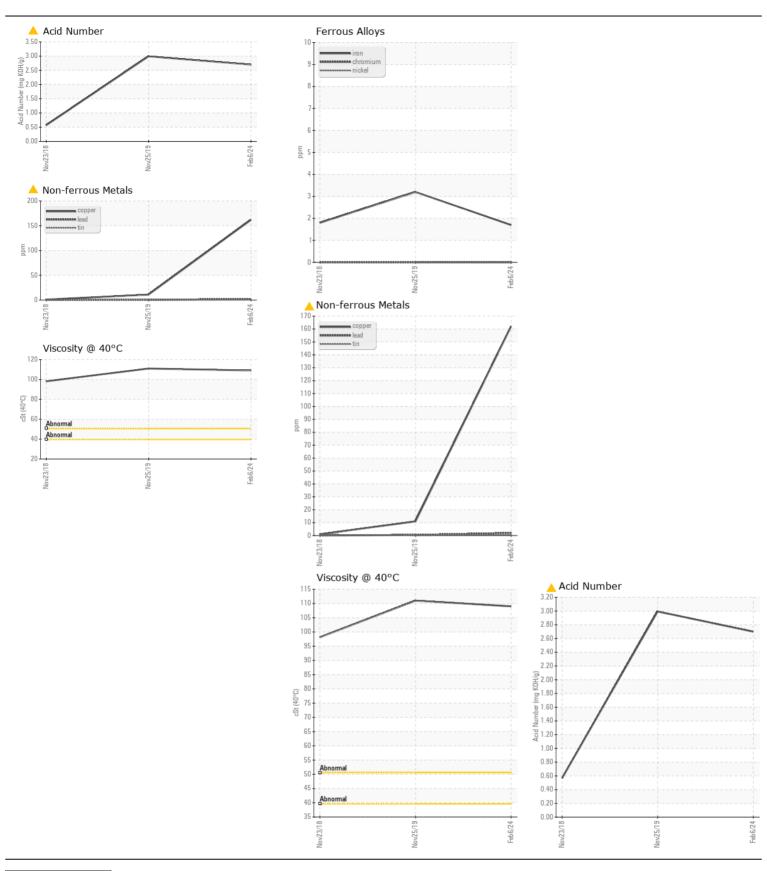
**WEAR** CONTAMINATION **FLUID CONDITION**  **ABNORMAL** NORMAL **ABNORMAL** 

**CS300** 

## **HYDROVANE D098705 - NDSU RESEARCH**

Component Compressor

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for a possible overheat condition. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number		Client Info		UCS06088931	UCS04860373	UCS04603282
	Sample Date		Client Info		06 Feb 2024	25 Nov 2019	23 Nov 2018
	Machine Age	hrs	Client Info		60421	29242	28819
	Oil Age	hrs	Client Info		2500	2000	2000
	Filter Age	hrs	Client Info		2500	2000	2000
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>50	2	3	2
The copper level is abnormal.	Chromium	ppm	ASTM D5185m	>10	0	0	0
	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>25	0	<1	<1
	Lead	ppm	ASTM D5185m	>25	2	<1	<1
	Copper	ppm	ASTM D5185m	>50	<b>162</b>	11	1
	Tin	ppm	ASTM D5185m	>15	<1	0	<1
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	0	1	<1
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	0	0	1
	Water		WC Method	>0.1	NEG	NEG	NEG
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	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	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		6	2	2
The AN level is above the recommended limit.	Boron	ppm	ASTM D5185m		0	<1	0
	Barium	ppm	ASTM D5185m		0	0	2
	Molybdenum	ppm	ASTM D5185m		<1	0	0
	Manganese	ppm	ASTM D5185m		0	0	<1
	Magnesium	ppm	ASTM D5185m		0	<1	<1
	Calcium	ppm	ASTM D5185m		0	0	0
	Phosphorus	ppm	ASTM D5185m		6	3	<1
	Zinc	ppm	ASTM D5185m		161	392	30
	Sulfur	ppm	ASTM D5185m		6	26	51
	Acid Number (AN)	mg KOH/g	ASTM D8045		<b>2.70</b>	<u>2.993</u>	0.567
	Visc @ 40°C	cSt	ASTM D445		109	111	98.16
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Certificate L2367

Laboratory Sample No.

Lab Number : 06088931 Unique Number : 10876376 Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : UCS06088931 Received **Tested** 

Diagnosed

: 15 Feb 2024 : 15 Feb 2024 - Don Baldridge

: 14 Feb 2024

WEST FARGO, ND US 58078 Contact: DALE K

**JEMCO-MAXAIR** 

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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)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

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