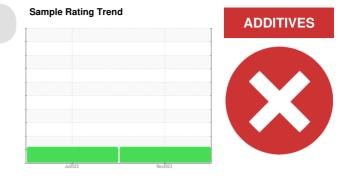


PROBLEM SUMMARY

PALLUBE 32 1706070005

Component Compressor



COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS										
Sample Status				SEVERE	SEVERE					
Barium	ppm	ASTM D5185m	730	• 0	• 0					

Customer Id: UCNDSMGRE **Sample No.:** UCS06007097 Lab Number: 06007097 Test Package: IND 2 To manage this report scan the QR code

To discuss the diagnosis or test data: Angela Borella +1 800-237-1369 angela.borella@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

25 Jul 2022 Diag: Angela Borella

ADDITIVES



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Barium ppm levels are severely low. The AN level is acceptable for this fluid.



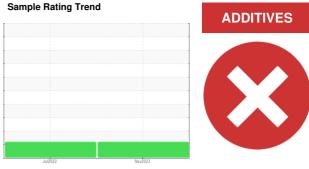
Sullivan

OIL ANALYSIS REPORT

PALLUBE 32 1706070005

Component

Compressor



DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

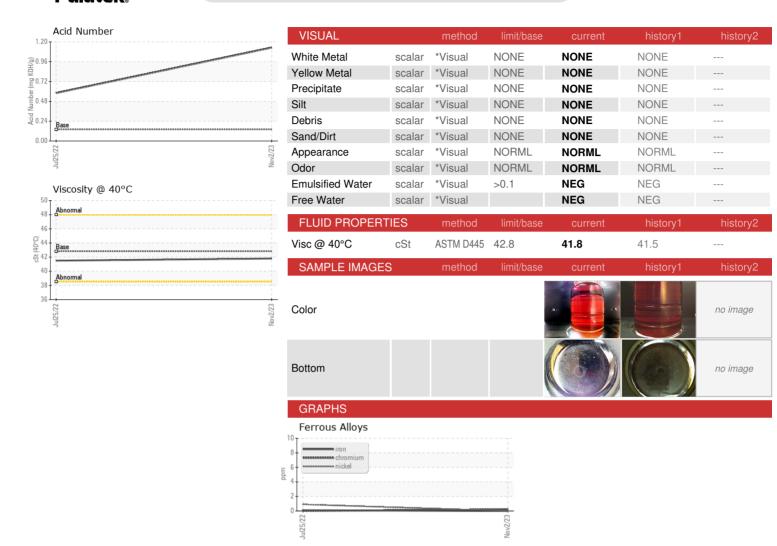
Fluid Condition

Barium ppm levels are severely low. The AN level is acceptable for this fluid.

Sample Number Client Info UCS06007097 UCS05606805				Juizuzz	19092023		
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 51189 39871 Oil Age hrs Client Info 3151 2388 Oil Changed Client Info Not Changd Not Changd Sample Status SEVERE SEVERE CONTAMINATION method limit/base current history1 history2 WEAR METALS method limit/base current history1 history3 Iron ppm ASTM D5185m >50 0 <1	Sample Number		Client Info		UCS06007097	UCS05606805	
Oil Age hrs Client Info 3151 2388 Oil Changed Client Info Not Changd Not Changd Sample Status SEVERE SEVERE CONTAMINATION method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 <1 Chromium ppm ASTM D5185m >50 0 <1 Nickel ppm ASTM D5185m 0 <1 0 Silver ppm ASTM D5185m 0 <1 0 Aluminum ppm ASTM D5185m 0 <1 Aluminum ppm ASTM D5185m 0 <1 1 Silver ppm ASTM D5185m >50 <1 1 Lead	Sample Date		Client Info		02 Nov 2023	25 Jul 2022	
Oil Changed Sample Status Client Info Not Changd SEVERE Not Changd SEVERE CONTAMINATION method limit/base current history1 history2 Wear WC Method >0.1 NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 <1 Chromium ppm ASTM D5185m >10 <1 0 Nickel ppm ASTM D5185m >10 <1 0 Silver ppm ASTM D5185m 0 <1 Aluminum ppm ASTM D5185m >25 0 0 Copper ppm ASTM D5185m >50 <1 1 Lead ppm ASTM D5185m >50 <1 1 Copper ppm ASTM D5185m >50 <1 1 -	Machine Age	hrs	Client Info		51189	39871	
SEVERE SEVERE	Oil Age	hrs	Client Info		3151	2388	
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 <1 Chromium ppm ASTM D5185m >10 <1 0 Nickel ppm ASTM D5185m >10 <1 0 Silver ppm ASTM D5185m >25 1 2 Aluminum ppm ASTM D5185m >25 1 2 Aluminum ppm ASTM D5185m >25 0 0 Lead ppm ASTM D5185m >50 <1 1 Copper ppm ASTM D5185m >50 <1 1 Vanadium ppm ASTM D5185m 0 0 0	Oil Changed		Client Info		Not Changd	Not Changd	
Water WC Method >0.1 NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 <1 Chromium ppm ASTM D5185m >10 <1 0 Nickel ppm ASTM D5185m 0 <1 0 Titanium ppm ASTM D5185m >25 1 2 Aluminum ppm ASTM D5185m >25 1 2 Aluminum ppm ASTM D5185m >25 1 2 Aluminum ppm ASTM D5185m >50 <1 1 Lead ppm ASTM D5185m >50 <1 1 Copper ppm ASTM D5185m >10 0 1 Vanadium ppm ASTM D5185m 0 0 0	Sample Status				SEVERE	SEVERE	
Water WC Method >0.1 NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 <1 Chromium ppm ASTM D5185m >10 <1 0 Nickel ppm ASTM D5185m 0 <1 0 Titanium ppm ASTM D5185m >25 1 2 Aluminum ppm ASTM D5185m >25 1 2 Aluminum ppm ASTM D5185m >25 1 2 Aluminum ppm ASTM D5185m >50 <1 1 Lead ppm ASTM D5185m >50 <1 1 Copper ppm ASTM D5185m >10 0 1 Vanadium ppm ASTM D5185m 0 0 0	CONTAMINATION	V	method	limit/base	current	history1	history2
Iron			WC Method	>0.1	NEG	NEG	
Chromium ppm ASTM D5185m >10 <1 0 Nickel ppm ASTM D5185m 0 <1	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >10 <1 0 Nickel ppm ASTM D5185m 0 <1	Iron	ppm	ASTM D5185m	>50	0	<1	
Nickel ppm ASTM D5185m 0 <1 Titanium ppm ASTM D5185m <1	Chromium		ASTM D5185m	>10	<1	0	
Titanium ppm ASTM D5185m <1 0 Silver ppm ASTM D5185m 0 <1	Nickel		ASTM D5185m		0	<1	
Aluminum ppm ASTM D5185m >25 1 2 Lead ppm ASTM D5185m >25 0 0 Copper ppm ASTM D5185m >50 <1	Titanium		ASTM D5185m		<1	0	
Aluminum ppm ASTM D5185m >25 1 2 Lead ppm ASTM D5185m >25 0 0 Copper ppm ASTM D5185m >50 <1	Silver	ppm	ASTM D5185m		0	<1	
Lead ppm ASTM D5185m >25 0 0 Copper ppm ASTM D5185m >50 <1	Aluminum		ASTM D5185m	>25	1	2	
Copper ppm ASTM D5185m >50 <1 1 Tin ppm ASTM D5185m >15 0 1 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 1 0 <1	Lead		ASTM D5185m	>25	0	0	
Tin ppm ASTM D5185m > 15 0 1	Copper		ASTM D5185m	>50	<1	1	
Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 1 0 <1			ASTM D5185m	>15	0	1	
Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 1 0 <1	Vanadium	ppm	ASTM D5185m		0	0	
Boron ppm ASTM D5185m 1 0 <1 Barium ppm ASTM D5185m 730 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0.0 0 0 Magnesium ppm ASTM D5185m 0 <1 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 459 409 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 590 1022 755 CONTAMINANTS method limit/base current history1 history2 Sodium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base	Cadmium		ASTM D5185m		0	0	
Barium ppm ASTM D5185m 730 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0.0 0 0 Magnesium ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0.0 0 0 Magnesium ppm ASTM D5185m 0 <1 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 459 409 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 590 1022 755 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 Sodium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base current history1 history2	Boron	ppm	ASTM D5185m	1	0	<1	
Manganese ppm ASTM D5185m 0.0 0 0 Magnesium ppm ASTM D5185m 0 <1	Barium	ppm	ASTM D5185m	730	• 0	• 0	
Magnesium ppm ASTM D5185m 0 <1 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 459 409 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 590 1022 755 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 Sodium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base current history1 history2	Molybdenum	ppm	ASTM D5185m	0	0	0	
Magnesium ppm ASTM D5185m 0 <1 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 459 409 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 590 1022 755 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 Sodium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base current history1 history2	Manganese	ppm	ASTM D5185m	0.0	0	0	
Phosphorus ppm ASTM D5185m 0 459 409 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 590 1022 755 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 Sodium ppm ASTM D5185m <1 0 Potassium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base current history1 history2		ppm	ASTM D5185m	0	<1	0	
Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 590 1022 755 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 Sodium ppm ASTM D5185m <1 0 Potassium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base current history1 history2	Calcium	ppm	ASTM D5185m	0	0	0	
Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 590 1022 755 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 Sodium ppm ASTM D5185m <1 0 Potassium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base current history1 history2	Phosphorus		ASTM D5185m	0	459	409	
Sulfur ppm ASTM D5185m 590 1022 755 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 Sodium ppm ASTM D5185m <1			ASTM D5185m	0	0	0	
Silicon ppm ASTM D5185m >25 0 0 Sodium ppm ASTM D5185m <1 0 Potassium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base current history1 history2	Sulfur		ASTM D5185m	590	1022	755	
Sodium ppm ASTM D5185m <1 0 Potassium ppm ASTM D5185m >20 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m <1 0 Potassium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base current history1 history2	Silicon	ppm	ASTM D5185m	>25	0	0	
Potassium ppm ASTM D5185m >20 <1 0 FLUID DEGRADATION method limit/base current history1 history2	Sodium		ASTM D5185m		<1	0	
				>20	<1	0	
Acid Number (AN) mg KOH/g ASTM D8045 0.14 1.13 0.58	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.14	1.13	0.58	

Sullivan

OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number Unique Number

Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : UCS06007097 : 06007097 : 10740859

₹ 40

35

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

Non-ferrous Metals

Viscosity @ 40°C

Received Diagnosed Diagnostician

: 20 Nov 2023

: 14 Nov 2023 : Angela Borella

GREEN BAY, WI Contact: TRAVIS BARTLETT travis.bartlett@bordendairy.com T: (920)338-3509

* - 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)

Acid Number

(B) 1.20 0.96 Ĕ 0.72

흩 0.48

0.00

US 54304

F:

NDSM HOLDINGS LLC