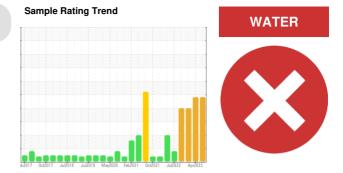


PROBLEM SUMMARY

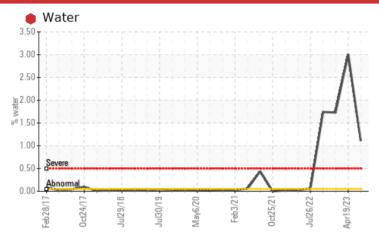
PLATE FREEZER PLATE FRZR 1-5

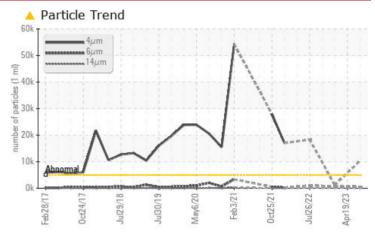
Component **Hydraulic System**

Hydraulic System Oil (--- GAL)



COMPONENT CONDITION SUMMARY





RECOMMENDATION

We advise that you check for the source of water entry. We advise that you perform a filter service and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS									
Sample Status				SEVERE	SEVERE	SEVERE			
Water	%	ASTM D6304	>0.05	1.11	3.01	1.73			
ppm Water	ppm	ASTM D6304	>500	11100	30100	17300			
Particles >4µm		ASTM D7647	>5000	10305		1231			
Oil Cleanliness		ISO 4406 (c)	>19/17/14	2 1/16/13		17/17/14			
Appearance	scalar	*Visual	NORML	▲ MILKY	▲ MILKY	▲ MILKY			
Emulsified Water	scalar	*Visual	>0.05	0.2%	0.2%	0.2%			

Customer Id: CONRUS Sample No.: USP0000567 Lab Number: 05928341 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

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

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Filter			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.			
Resample			?	We recommend an early resample to monitor this condition.			
Check Water Access			?	We advise that you check for the source of water entry.			
Filter Fluid			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.			

HISTORICAL DIAGNOSIS

19 Apr 2023 Diag: Doug Bogart

WATER



We advise that you check for the source of water entry. We advise that you perform a filter service and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles and water present in this sample. All component wear rates are normal. Appearance is milky. There is a high concentration of water present in the oil. Moderate concentration of visible sediment present in the oil. The AN level is acceptable for this fluid.



25 Jan 2023 Diag: Jonathan Hester

WATER



We advise that you check for the source of water entry. We advise that you perform a filter service, and use offline filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.All component wear rates are normal. Appearance is milky. There is a high concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid.

View report

30 Oct 2022 Diag: Doug Bogart

WATER



We advise that you check for the source of water entry. We advise that you perform a filter service and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count. All component wear rates are normal. Appearance is milky. There is a high concentration of water present in the oil. The AN level is acceptable for this fluid.



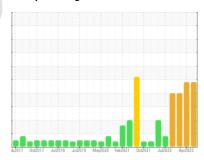


OIL ANALYSIS REPORT

PLATE FREEZER **PLATE FRZR 1-5**

Hydraulic System

Hydraulic System Oil (--- GAL)



Sample Rating Trend



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you perform a filter service and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Appearance is milky. There is a high amount of silt (particulates < 6 microns in size) present in the oil. There is a high concentration of water present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0000567	USP248825	USP05751437
Sample Date		Client Info		19 Aug 2023	19 Apr 2023	25 Jan 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	8	17	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	<1	1
Lead	ppm	ASTM D5185m	>20	0	0	2
Copper	ppm	ASTM D5185m	>20	1	5	5
Tin	ppm	ASTM D5185m	>20	<1	<1	2
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		62	65	70
Barium	ppm	ASTM D5185m		<1	<1	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		4	4	4
Calcium	ppm	ASTM D5185m		80	138	143
Phosphorus	ppm	ASTM D5185m		200	232	255
Zinc	ppm	ASTM D5185m		124	248	213
Sulfur	ppm	ASTM D5185m		1091	1360	1457
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	3	9	3
Sodium	ppm	ASTM D5185m		4	7	6
Potassium	ppm	ASTM D5185m	>20	<1	<1	2
Water	%	ASTM D6304	>0.05	1.11	3.01	1.73
ppm Water	ppm	ASTM D6304	>500	11100	30100	17300
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	10305		1231
Particles >6µm		ASTM D7647	>1300	556		671
Particles >14µm		ASTM D7647	>160	42		114
Particles >21µm		ASTM D7647	>40	12		38
Particles >38µm		ASTM D7647	>10	1		6
Particles >71µm		ASTM D7647	>3	0		1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u>^</u> 21/16/13		17/17/14
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2

mg KOH/g ASTM D8045

Acid Number (AN)

0.89

0.83

0.93



OIL ANALYSIS REPORT

