

PROBLEM SUMMARY

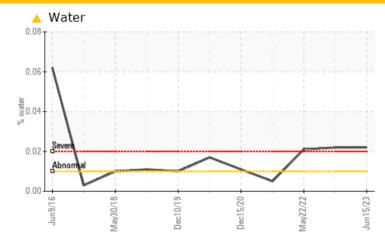
IMMUCELL **VILTER 40 - VILTER STAGE 1**

Refrigeration Compressor

VILTER 717 COMPRESSOR OIL ISO 68 (--- GAL)

Sample Rating Trend **WATER**

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS									
Sample Status				MARGINAL	MARGINAL	MARGINAL			
Water	%	ASTM D6304	>0.01	△ 0.022	▲ 0.022	△ 0.021			
nnm Water	nnm	ASTM D6304	>100	A 226.1	A 224 9	A 211 6			

Customer Id: AAASCA **Sample No.:** WC0736118 Lab Number: 05900744 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
Resample			?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

08 May 2023 Diag: Jonathan Hester

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



22 May 2022 Diag: Doug Bogart

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

View report

05 Jan 2022 Diag: Don Baldridge

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



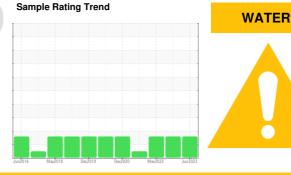


OIL ANALYSIS REPORT

IMMUCELL VILTER 40 - VILTER STAGE 1

Refrigeration Compressor

VILTER 717 COMPRESSOR OIL ISO 68 (--- GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a light concentration of water present in the

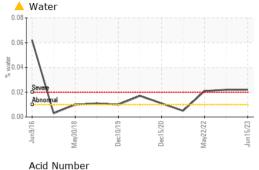
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0736118	WC0736104	WC0675166
Sample Date		Client Info		15 Jun 2023	08 May 2023	22 May 2022
Machine Age	hrs	Client Info		60517	56456	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				MARGINAL	MARGINAL	MARGINAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	3	2	<1
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	0	0
Lead	ppm	ASTM D5185m	>2	<1	<1	0
Copper	ppm	ASTM D5185m	>8	0	<1	0
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
0	10 10 100	AOTH DEGO		_	0	0
Cadmium	ppm	ASTM D5185m		0	0	U
ADDITIVES	ррш	method	limit/base	current	history1	history2
	ppm		limit/base	-		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m		current 0	history1	history2 <1
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0	current 0 0	history1 0 0	history2 <1 0
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0	current 0 0 0	history1 0 0 0	history2 <1 0 0
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	current 0 0 0 0	history1 0 0 0 0 0	history2 <1 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0	current 0 0 0 0 0	history1 0 0 0 0 0 0	history2 <1 0 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0	current 0 0 0 0 0 0 0 0	history1 0 0 0 0 0 0 0 0	history2 <1 0 0 0 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0	Current 0 0 0 0 0 0 0 0 0 0	history1 0 0 0 0 0 0 0 342	history2 <1 0 0 0 0 0 0 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0	Current 0 0 0 0 0 0 0 0 0 0 0	history1 0 0 0 0 0 0 0 342	history2 <1 0 0 0 0 0 0 <1 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0	Current 0 0 0 0 0 0 0 0 0 0 0 0	history1 0 0 0 0 0 0 0 342 0 0	history2 <1 0 0 0 0 0 0 <1 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0 0	current 0 0 0 0 0 0 0 0 current	history1 0 0 0 0 0 0 0 342 0 0 history1	history2 <1 0 0 0 0 0 0 <1 0 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0 0	current 0 0 0 0 0 0 0 0 0 current <1	history1 0 0 0 0 0 0 0 342 0 0 history1 2	history2 <1 0 0 0 0 0 0 <1 0 history2 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0 0 0 limit/base	current 0 0 0 0 0 0 0 0 0 0 current <1	history1 0 0 0 0 0 0 0 342 0 0 history1 2	history2 <1 0 0 0 0 0 0 <1 0 0 history2 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0 0 0 limit/base >15	current 0 0 0 0 0 0 0 0 0 0 current <1 0 <1	history1 0 0 0 0 0 0 0 342 0 0 history1 2 0 <1	history2 <1 0 0 0 0 0 0 <1 0 0 history2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0 0 0 limit/base >15 >20 >0.01	current 0 0 0 0 0 0 0 0 0 current <1 0 <1 0 0.022	history1 0 0 0 0 0 0 0 342 0 0 history1 2 0 <1	history2 <1 0 0 0 0 0 0 <1 0 0 history2 0 0 0 0 history2



OIL ANALYSIS REPORT



VISUAL		method	ilmit/base	current	nistory i	nistory2
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	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	>0.01	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FILLID PROPERTIES		mothod	limit/haca	ourront	hictory1	hictory2

0.25 문 0.15 P 0.05 0.00

Visc @ 40°C cSt ASTM D445 68 68.53 68.31 67.5

SAMPLE IMAGES

method

limit/base

current

history1

history2

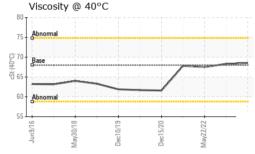
Color

VICLIA

Bottom

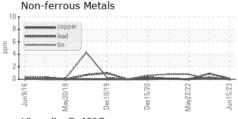


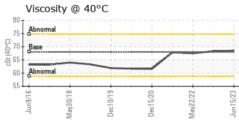


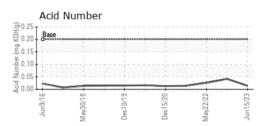


GRAPHS

Ferrous Alloys











Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package : IND 2

: WC0736118 : 05900744 : 10562100

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed

: 17 Jul 2023 : 25 Jul 2023 Diagnostician : Doug Bogart

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) **AAA ENERGY SERVICES**

4 COMMERCIAL RD SCARBOROUGH, ME US 04074

Contact: CHRIS WASSON cwasson@aaaenergy.com T: (207)883-1473

F: x: