

OIL ANALYSIS REPORT

Area [SV2310310182/1] Machine Id CARRIER UMUC CONFERENCE CENTER CH4-B (S/N 1304003701-B) Component

Refrigeration Compressor

ICI EMKARATE RL 46H (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

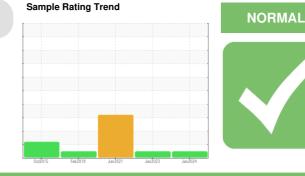
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

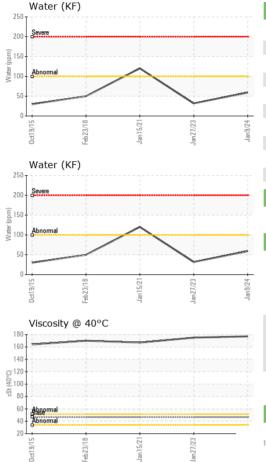
Confirm oil type. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0798506	WC0603657	WCI2310140
Sample Date		Client Info		09 Jan 2024	27 Jan 2023	15 Jan 2021
Machine Age	hrs	Client Info		51036	2110	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	0	<1
Chromium	ppm	ASTM D5185m	>2	<1	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>3	2	0	<1
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m	>8	0	<1	<1
Tin	ppm	ASTM D5185m	>4	0	0	<1
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	nnm	ASTM D5185m		0		<1
Caumum	ppm	AOTIN DOTOSIII		U	0	~1
ADDITIVES	ppm	method	limit/base	current	history1	history2
	ppm		limit/base 0	-	history1 0	
ADDITIVES		method		current 0 3	history1 0 0	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0 0 0	current 0	history1 0 0 0	history2 <1 0 0
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0	current 0 3 0 0	history1 0 0 0 0	history2 <1 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0	current 0 3 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	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 0	Current 0 3 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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 0 1900	Current 0 3 0 0 0 0 0 411	history1 0 0 0 0 0 0 0 0 56	history2 <1 0 0 0 0 0 0 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 0 1900 0	Current 0 3 0 0 0 0 0 411 0	history1 0 0 0 0 0 0 0 0 56 0	history2 <1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 0 1900	Current 0 3 0 0 0 0 0 411	history1 0 0 0 0 0 0 0 0 56	history2 <1 0 0 0 0 0 0 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 0 1900 0	Current 0 3 0 0 0 0 0 411 0	history1 0 0 0 0 0 0 0 0 56 0	history2 <1 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	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 0 1900 0 25	Current 0 3 0 0 0 0 411 0 0	history1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 56 0 0 history1 7	<1 0 0 0 0 0 0 0 11
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 1900 0 25 Iimit/base >15	current 0 3 0 0 0 0 411 0 0 current 4 0	history1 0 0 0 0 0 0 0 0 0 0 0 0 0 56 0 0 history1 7 0	<1 0 0 0 0 0 0 0 10 0 11 history2 ▲ 16 1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	0 0 0 0 0 1900 0 25 limit/base	current 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 current 4 0 <1	history1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 56 0 0 history1 7	<1 0 0 0 0 0 0 11 history2 ▲ 16 1 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	method ASTM D5185m ASTM D5185m	0 0 0 0 1900 0 25 25 >15 >15 >20 >0.01	current 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 current 4 0 <1 0.0005	history1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 56 0 0 history1 7 0 <1 0.003	<1 0 0 0 0 0 0 11 history2 16 1 0 0 12
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0 1900 0 25 Imit/base >15	current 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 current 4 0 <1	history1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 56 0 0 history1 7 0 <1	<1 0 0 0 0 0 0 11 history2 ▲ 16 1 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 ASTM D5185m	0 0 0 0 1900 0 25 25 >15 >15 >20 >0.01	current 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 current 4 0 <1 0.0005	history1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 56 0 0 history1 7 0 <1 0.003	<1 0 0 0 0 0 0 11 history2 16 1 0 0 12

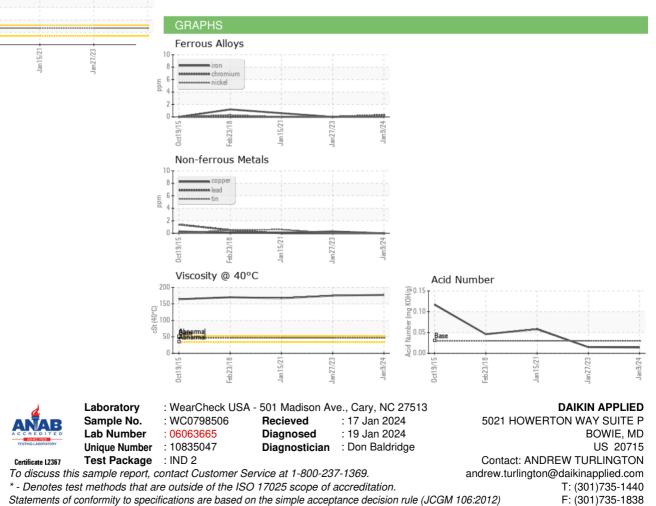


OIL ANALYSIS REPORT



100100						
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	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
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.8	177	175	167
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color						

Bottom



Contact/Location: ANDREW TURLINGTON - MCQUPP