

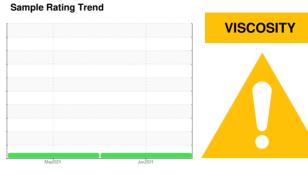
OIL ANALYSIS REPORT

[25938]

CARRIER 365POW CHILLER (S/N 3811Q21049)

Compressor

COMP OIL (POE) ISO 68 (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

All component wear rates are normal.

Contamination

The water content is negligible. There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. 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		PP0001121	PP0001419	
Sample Date		Client Info		12 Jun 2024	28 May 2024	
Machine Age	hrs	Client Info		13739	13537	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	
Iron	ppm	ASTM D5185(m)	>50	<1	<1	
Chromium	ppm	ASTM D5185(m)	>10	0	0	
Nickel	ppm	ASTM D5185(m)		0	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>25	0	0	
Lead	ppm	ASTM D5185(m)	>25	0	<1	
Copper	ppm	ASTM D5185(m)	>50	<1	<1	
Tin	ppm	ASTM D5185(m)	>15	0	0	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	<1	1	
Barium	ppm	ASTM D5185(m)	5	0	0	
Molybdenum	ppm	ASTM D5185(m)	5	0	0	
Manganese	ppm	ASTM D5185(m)		0	0	
Magnesium	ppm	ASTM D5185(m)	5	<1	<1	
0 1 1						
Calcium	ppm	ASTM D5185(m)	5	0	0	
Calcium Phosphorus	ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 400	0 1795	0 1770	
		, ,	400	-		
Phosphorus	ppm	ASTM D5185(m)	400	1795	1770	
Phosphorus Zinc	ppm	ASTM D5185(m) ASTM D5185(m)	400 5	1795 3	1770 11	
Phosphorus Zinc Sulfur	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	400 5	1795 3 24	1770 11 178	
Phosphorus Zinc Sulfur Lithium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	400 5 100	1795 3 24 <1	1770 11 178 <1	
Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	400 5 100 limit/base	1795 3 24 <1 current	1770 11 178 <1 history1	 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	400 5 100 limit/base	1795 3 24 <1 current	1770 11 178 <1 history1	 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	400 5 100 limit/base >25	1795 3 24 <1 current 22 <1	1770 11 178 <1 history1 20 <1	history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	400 5 100 limit/base >25 >20	1795 3 24 <1 current 22 <1 <1	1770 11 178 <1 history1 20 <1	 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D6304*	400 5 100 limit/base >25 >20 >0.1	1795 3 24 <1 current 22 <1 <1 0.016	1770 11 178 <1 history1 20 <1 0 0.008	 history2

Acid Number (AN)

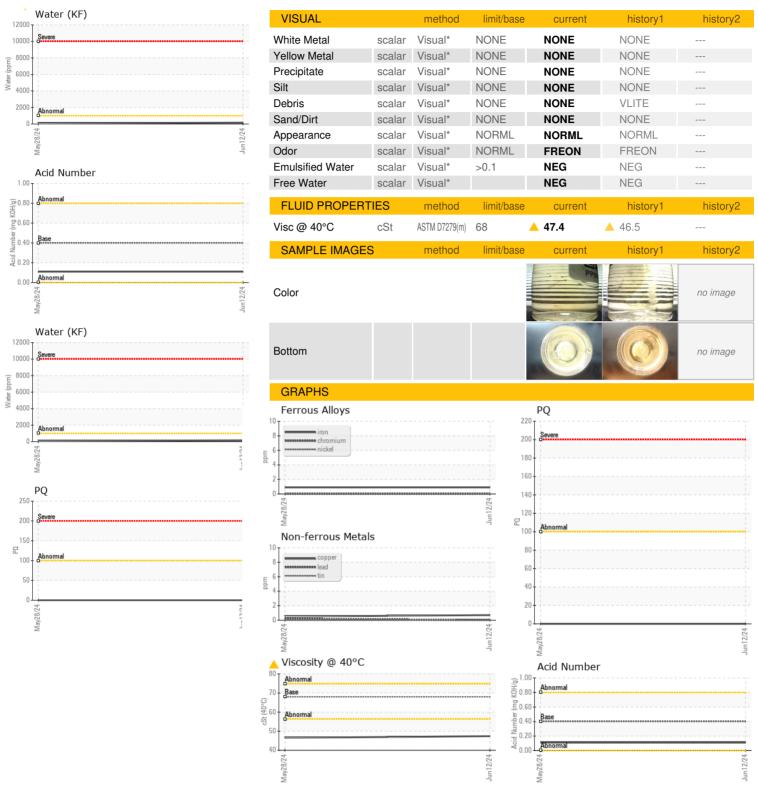
mg KOH/g ASTM D974* 0.40

0.11

0.11



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PP0001121 : 02641754 Unique Number : 5799293

Received : 13 Jun 2024 Tested Diagnosed

: 14 Jun 2024 : 14 Jun 2024 - Kevin Marson

Test Package : IND 2 (Additional Tests: KF, TAN Man)

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Complete Chiller Solutions

8-4444 Eastgate Parkway Mississauga, ON **CA L4W 4T6** Contact: Neil Patten neil@complete-cs.ca T: (905)629-8585 F:

Report Id: COM844MIS [WCAMIS] 02641754 (Generated: 06/14/2024 11:38:17) Rev: 1

Contact/Location: Neil Patten - COM844MIS