

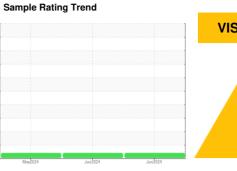
OIL ANALYSIS REPORT



[0026107] **CARRIER 365 POW CHILLER (S/N 3811Q21049)**

Component Compressor

COMP OIL (POE) ISO 68 (12 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.

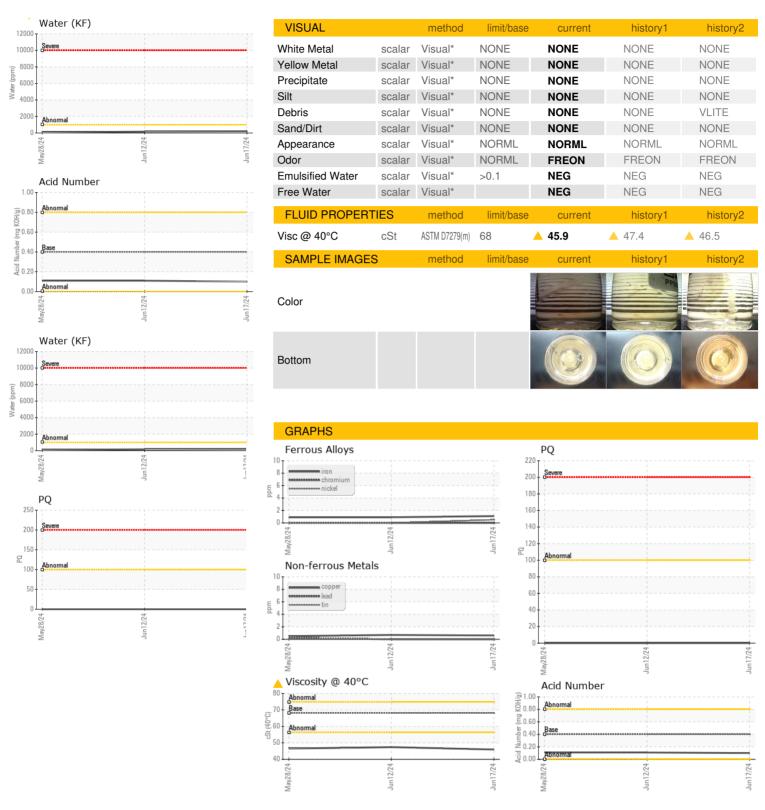
Fluid Condition

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	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PP0001122	PP0001121	PP0001419
Sample Date		Client Info		17 Jun 2024	12 Jun 2024	28 May 2024
Machine Age	hrs	Client Info		13827	13739	13537
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>50	1	<1	<1
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)		<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	0	0
Lead	ppm	ASTM D5185(m)	>25	0	0	<1
Copper	ppm	ASTM D5185(m)	>50	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Boron	ppm	ASTM D5185(m)	5	<1	<1	1
	ppm ppm		5 5	<1 0	<1 0	1
Boron Barium		ASTM D5185(m)				
Boron Barium Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m)	5	0	0	0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5	0	0	0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5	0 0 0	0 0 0	0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5	0 0 0	0 0 0 <1	0 0 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 5 400	0 0 0 0	0 0 0 <1 0	0 0 0 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 5 400	0 0 0 0 0 1815	0 0 0 <1 0 1795	0 0 0 <1 0 1770
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 5 400 5	0 0 0 0 0 1815 2	0 0 0 <1 0 1795	0 0 0 <1 0 1770
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 5 400 5	0 0 0 0 0 1815 2 27	0 0 0 <1 0 1795 3 24	0 0 0 <1 0 1770 11 178
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 400 5 100	0 0 0 0 0 1815 2 27 <1	0 0 0 <1 0 1795 3 24 <1	0 0 0 <1 0 1770 11 178
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 400 5 100	0 0 0 0 0 1815 2 27 <1	0 0 0 <1 0 1795 3 24 <1	0 0 0 <1 0 1770 11 178 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	5 5 5 400 5 100	0 0 0 0 0 1815 2 27 <1 current	0 0 0 <1 0 1795 3 24 <1 history1	0 0 0 <1 0 1770 11 178 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 400 5 100 limit/base >25	0 0 0 0 0 1815 2 27 <1 current 21	0 0 0 <1 0 1795 3 24 <1 history1 22 <1	0 0 0 <1 0 1770 11 178 <1 history2 20 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 400 5 100 limit/base >25	0 0 0 0 0 1815 2 27 <1 current 21 <1	0 0 0 <1 0 1795 3 24 <1 history1 22 <1 <1	0 0 0 <1 0 1770 11 178 <1 history2 20 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 400 5 100 limit/base >25 >20 >0.1	0 0 0 0 1815 2 27 <1 current 21 <1 <1	0 0 0 <1 0 1795 3 24 <1 history1 22 <1 <1 0.016	0 0 0 -1 0 1770 11 178 -1 history2 20 -1 0 0.008



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number

: PP0001122

: 02642610 Unique Number : 5800149

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received **Tested**

: 20 Jun 2024 Diagnosed

: 20 Jun 2024 - Kevin Marson

: 18 Jun 2024

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:

Contact/Location: Neil Patten - COM844MIS

Report Id: COM844MIS [WCAMIS] 02642610 (Generated: 07/09/2024 09:22:52) Rev: 1