

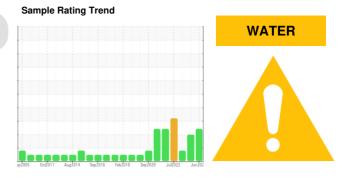
OIL ANALYSIS REPORT



3500 Steeles ME2 [GTT224-482 111PBBLWE] **YORK SBNM228120**

Chiller

YORK TYPE C (--- GAL)



DIAGNOSIS

Recommendation

If not recently done change any filter driers to reduce moisture level. We recommend an early resample to monitor this condition.

Copper ppm levels are abnormal. The elevated copper reading suggests the effects of oil migration through the evaporator (oil loss from the compressor) possibly occurring during intervals of operation at low cooling load conditions.

Contamination

There is a light 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		GTT	GTT0001300	GTT61644
Sample Date		Client Info		26 Jun 2024	12 Dec 2023	04 Apr 2023
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		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
Iron	ppm	ASTM D5185(m)	>8	2	3	2
Chromium	ppm	ASTM D5185(m)	>2	0	0	<1
Nickel	ppm	ASTM D5185(m)		<1	<1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)	>2	0	0	
Aluminum	ppm	ASTM D5185(m)	>3	<1	1	<1
Lead	ppm	ASTM D5185(m)	>2	0	<1	<1
Copper	ppm	ASTM D5185(m)	>8	<u> </u>	4 3	<u>12</u>
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
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)	0	<1	<1	
Barium	ppm	ASTM D5185(m)	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	0	0	0	
Manganese	ppm	ASTM D5185(m)	0	0	0	
Magnesium	ppm	ASTM D5185(m)	0	0	0	
Calcium	ppm	ASTM D5185(m)	0	0	0	
Phosphorus	ppm	ASTM D5185(m)	0	<1	0	
Zinc	ppm	ASTM D5185(m)	0	<1	1	<1
Sulfur	ppm	ASTM D5185(m)	200	128	259	
Lithium	ppm	ASTM D5185(m)		<1	1	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<1	1	
Sodium	ppm	ASTM D5185(m)		0	0	
Potassium	ppm	ASTM D5185(m)	>20	0	<1	
ppm Water	ppm	ASTM D6304*	>50	151	38	35
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.11	0.05	△ 0.10	0.031



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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Precipitate	scalar	Visual*	NONE	NONE	NONE	
Silt	scalar	Visual*	NONE	VLITE	NONE	
Debris	scalar	Visual*	NONE	NONE	NONE	
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	
Appearance	scalar	Visual*	NORML	NORML	NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	63.8	32.2	33.6	
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						no image
Bottom					0.	no image
GRAPHS						



 Sample No.
 : GTT
 Received
 : 11 Jul 2024

 Lab Number
 : 02647466
 Tested
 : 16 Jul 2024

Unique Number : 5813018 Diagnosed : 16 Jul 2024 - Bill Quesnel

Test Package: IND 2 (Additional Tests: KF, TAN Man) *To discuss this sample report, contact Customer Service at 1-905-847-9300 Ext 26.*

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Damages: Seller shall in no event be liable for special, incidental, or consequential damages, of a commercial nature, resulting from any cause.

Tested : 16 Jul 2024

Diagnosed : 16 Jul 2024 - Bill Quesnel

Contact: Service Manager

Johnson Controls - Markham

Accounts Payable A-33, P.O. Box 2012

Report Id: GTT0000206 [WCAMIS] 02647466 (Generated: 07/16/2024 14:53:16) Rev: 1

Contact/Location: Service Manager - GTT0000206

T:

F:

Milwaukee, WI

US 532012012