

OIL ANALYSIS REPORT









CEGEP Levis [GTT224-474 1-1329481] CARRIER 4512Q22212

Chiller

Fluid ICI EMKARATE RL 68H (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

The elevated moisture content is associated with POE oils which are hygroscopic, and can absorb moisture from sampling and processing.

Fluid Condition

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

C GAL							, T
Sample Number Client Info GTT0001131	(GAL)				Apr2024		
Client Info	SAMPLE INFORMA	TION	method	limit/base	current	history1	history2
Machine Age	Sample Number		Client Info		GTT0001131		
Dit Age	Sample Date		Client Info		24 Apr 2024		
Dil Changed Client Info N/A	Machine Age h	ırs	Client Info		0		
ATTENTION	Dil Age h	ırs	Client Info		0		
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185(m) >8 <1	Oil Changed		Client Info		N/A		
STM D5185(m) S8	Sample Status				ATTENTION		
Description	WEAR METALS		method	limit/base	current	history1	history2
ASTM D5185(m) Company Company ASTM D6185(m) Company	r on p	pm	ASTM D5185(m)	>8	<1		
Description			ASTM D5185(m)	>2	0		
Silver	lickel p	pm	ASTM D5185(m)		<1		
Silver			ASTM D5185(m)		0		
Astmological Column			ASTM D5185(m)	>2	0		
Deep	Aluminum p	pm	ASTM D5185(m)	>3	<1		
Description	.ead p	pm	ASTM D5185(m)	>2	0		
ASTM D5185(m) Service Solution Service Solution Service Solution Service Servi			ASTM D5185(m)	>8	2		
Vanadium ppm ASTM D5185(m) 0 Beryllium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 Phosphorus ppm ASTM D5185(m) 0 Phosphorus ppm ASTM D5185(m) 0 5 Sulfur ppm ASTM D5185(m) 25 22 Sulfur ppm ASTM D5185(m) >15		pm	ASTM D5185(m)	>4	0		
Description	Antimony	pm	ASTM D5185(m)		0		
Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 <1	/anadium p	pm	ASTM D5185(m)		0		
ADDITIVES	Beryllium p	pm	ASTM D5185(m)		0		
Soron ppm ASTM D5185(m) O <1	Cadmium p	pm	ASTM D5185(m)		0		
Sarium	ADDITIVES		method	limit/base	current	history1	history2
Sarium	Boron p	pm	ASTM D5185(m)	0	<1		
Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 0 Calcium ppm ASTM D5185(m) 0 <1 Phosphorus ppm ASTM D5185(m) 1900 1162 Zinc ppm ASTM D5185(m) 0 5 Sulfur ppm ASTM D5185(m) 25 22 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 9 Sodium ppm ASTM D5185(m) >20 <1 Otation ppm ASTM D5185(m) >20 <1 <			. ,	0	0		
Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 0 Calcium ppm ASTM D5185(m) 0 <1 Phosphorus ppm ASTM D5185(m) 1900 1162 Zinc ppm ASTM D5185(m) 0 5 Sulfur ppm ASTM D5185(m) 25 22 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 9 Potassium ppm ASTM D5185(m) >20 <1 Image: contract co			()	0	0		
Magnesium ppm ASTM D5185(m) 0 Calcium ppm ASTM D5185(m) 0 <1			ASTM D5185(m)		0		
Calcium ppm ASTM D5185(m) 0 <1 Phosphorus ppm ASTM D5185(m) 1900 1162 Zinc ppm ASTM D5185(m) 0 5 Sulfur ppm ASTM D5185(m) 25 22 Lithium ppm ASTM D5185(m) <1				0	0		
Phosphorus ppm ASTM D5185(m) 1900 1162 Zinc ppm ASTM D5185(m) 0 5 Sulfur ppm ASTM D5185(m) 25 22 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 9 Sodium ppm ASTM D5185(m) 0 Potassium ppm ASTM D5185(m) >20 <1 uppm Water ppm ASTM D6304* >200 497	-		. ,	0	<1		
Contamination Contaminatio			. ,		1162		
Sulfur ppm ASTM D5185(m) 25 22 Lithium ppm ASTM D5185(m) < 1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 9 Sodium ppm ASTM D5185(m) 0 Potassium ppm ASTM D5185(m) >20 <1			ASTM D5185(m)	0	5		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 9 Sodium ppm ASTM D5185(m) 0 Potassium ppm ASTM D5185(m) >20 <1				25	22		
Solicon ppm ASTM D5185(m) >15 9			ASTM D5185(m)		<1		
Sodium ppm ASTM D5185(m) 0 Potassium ppm ASTM D5185(m) >20 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium ppm ASTM D5185(m) 0 Potassium ppm ASTM D5185(m) >20 <1	Silicon p	pm	ASTM D5185(m)	>15	9		
Potassium ppm ASTM D5185(m) >20 <1 ppm Water ppm ASTM D6304* >200 497			. ,				
ppm Water ppm ASTM D6304* >200 497			, ,	>20			
FLUID DEGRADATION method limit/base current history1 history2							
Thorne Thorne Thorne Thorne	FLUID DEGRADATI	ION	method	limit/base	current	history1	history2

Acid Number (AN)

mg KOH/g ASTM D974* 0.02

0.08



OIL ANALYSIS REPORT

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	72.3	54.3		
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						



Sample No. : GTT0001131 Received : 02 Jul 2024 **Lab Number** : 02645087 Tested : 05 Jul 2024

Unique Number : 5802626 Diagnosed : 05 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.

Johnson Controls- Quebec

Société de Contrôles Johnson Canada, 765 Ave Godin Québec, QC

CA G1M 2W8 Contact: Service Manager

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F: