

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

FES CARCOL 12 (S/N 16S68L)

Refrigeration Compressor

USPI ALT-68 SC (--- GAL)

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

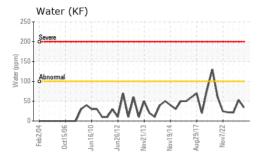
Fluid Condition

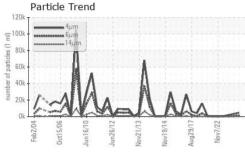
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

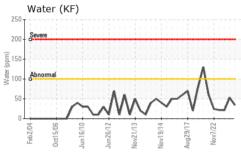
		32004 Oct201	06 Jun2010 Jun2012	Nov2013 Nov2014 Aug2017 N	lov2022	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0012837	USP0005498	USP0001712
Sample Date		Client Info		29 May 2024	03 Feb 2024	02 Oct 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	0	0
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>3	<1	0	<1
Lead	ppm	ASTM D5185m	>2	<1	0	0
Copper	ppm	ASTM D5185m	>8	0	0	0
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium		ASTM D5185m	7	<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
	ppm					
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		<1	0	0
Calcium	ppm	ASTM D5185m		0	0	<1
Phosphorus	ppm	ASTM D5185m		1	0	0
Zinc	ppm	ASTM D5185m		0	0	<1
Sulfur	ppm	ASTM D5185m	50	<1	0	0
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	3	3	3
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	2	1	<1
Water	%	ASTM D6304	>0.01	0.003	0.005	0.002
ppm Water	ppm	ASTM D6304	>100	34	53	21.2
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		4589	3269	1772
Particles >6µm		ASTM D7647	>2500	907	639	259
Particles >14µm		ASTM D7647	>320	33	26	9
Particles >21µm		ASTM D7647	>80	5	4	3
Particles >38µm		ASTM D7647	>20	0	1	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>/18/15	19/17/12	19/16/12	18/15/10
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.014	0.012

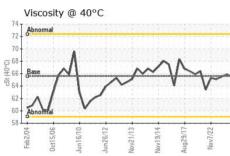


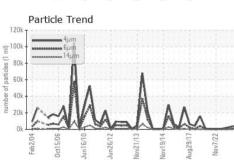
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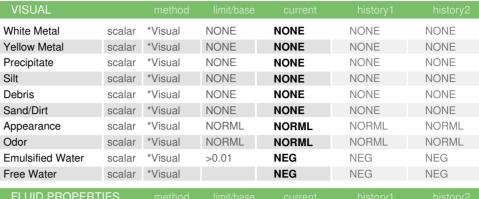












FLUID PROPER	IIIES	method	ilmit/base		nistory i	nistoryz
Visc @ 40°C	cSt	ASTM D445	65.6	65.5	65.9	65.5

SAMPLE IMAGES	method			history2
		112	NH3	



Ferro	ous All	oys	enant a				Par 491,520 _T	ticle Cour	it		T ²
-	iron chrom	ilum					122,880				+
	IIICKEI		^^				30,720	****			
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Feb2/04	0ct15/06	Jun16/10 Jun26/12	Nov21/13	Nov19/14	Aug29/17	Nov7/22	直 1,920-	13	`		+
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		1	1	~	1	1	8 Shreet	mal			+
Feb2/04	Oct15/06	Jun16/10	Nov21/13	Nov19/14	Aug29/17-	Nov7/22	2+				
	osity @	与 40°C	Nov	No.	Au	Ž	0, 4µ Aci ⊕ 0.02 -	gμ d Number	14μ	21μ 38μ	71,
Base	$ \wedge $	\- <u>-</u>	<u>_</u> ^	~	V~	~	Acid Number (mg KOH/g)	ΛΛ.	۸۸	M.	11
Atonom	adal .						0.01- Base	VVL	MAL	سا	7
Feb2/04	0ct15/06	Jun16/10 +	Nov21/13	Nov19/14	Aug29/17 -	Nov7/22 +	Acid Feb2/04	Oct15/06	Jun26/12 +	Nov19/14	Nov7/22





Laboratory Sample No.

: USP0012837 Lab Number : 06194017 Unique Number : 11056140 Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 May 2024

Tested Diagnosed

: 30 May 2024 : 31 May 2024 - Doug Bogart

Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

CARGILL FOODS-COLUMBUS

COLUMBUS, NE US 68601 Contact:

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