

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

HTC-1 (S/N S0274NFMNTHAA3)

Refrigeration Compressor

FRICK COMPRESSOR OIL #3 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

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.

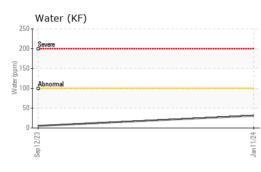
Fluid Condition

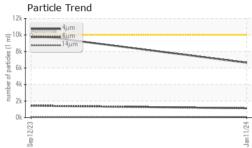
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

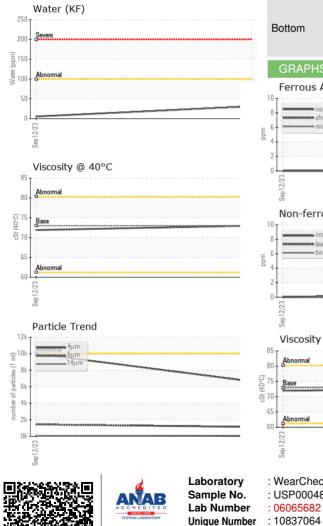
		-	Sep2023	Jan2024		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0004861	USP0001445	
Sample Date		Client Info		11 Jan 2024	12 Sep 2023	
Machine Age	hrs	Client Info		180415	179485	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	0	
Chromium	ppm	ASTM D5185m	>2	0	0	
Nickel	ppm	ASTM D5185m		0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>3	<1	<1	
Lead	ppm	ASTM D5185m	>2	0	0	
Copper	ppm	ASTM D5185m	>8	<1	0	
Tin	ppm	ASTM D5185m	>4	0	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m		2	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m		2	0	
Calcium	ppm	ASTM D5185m		2	0	
Phosphorus	ppm	ASTM D5185m		0	0	
Zinc	ppm	ASTM D5185m		0	0	
Sulfur	ppm	ASTM D5185m		32	<1	
CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	0	
Sodium	ppm	ASTM D5185m		0	0	
Potassium	ppm	ASTM D5185m	>20	4	0	
Water	%	ASTM D6304	>0.01	0.003	0.001	
ppm Water	ppm	ASTM D6304	>100	31	5.5	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	6640	9999	
Particles >6µm		ASTM D7647	>2500	1126	1445	
Particles >14µm		ASTM D7647	>320	101	42	
Particles >21µm		ASTM D7647	>80	33	7	
Particles >38µm		ASTM D7647	>20	0	1	
Particles >71µm		ASTM D7647	>4	0	0	
Oil Cleanliness		ISO 4406 (c)	>20/18/15	20/17/14	20/18/13	
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		0.014	0.013	



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VISUAL		method				history2
hite Metal	scalar	*Visual	NONE	NONE	NONE	
ellow Metal	scalar	*Visual	NONE	NONE	NONE	
ecipitate	scalar	*Visual	NONE	NONE	NONE	
lt	scalar	*Visual	NONE	NONE	LIGHT	
ebris	scalar	*Visual	NONE	NONE	NONE	
and/Dirt	scalar	*Visual	NONE	NONE	NONE	
ppearance	scalar	*Visual	NORML	NORML	NORML	
dor	scalar	*Visual	NORML	NORML	NORML	
mulsified Water	scalar	*Visual	>0.01	NEG	NEG	
ree Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
isc @ 40°C	cSt	ASTM D445	73	73.0	71.9	
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
olor				•	•	no image
ottom						no image
GRAPHS						
Ferrous Alloys				Particle Count	t	
iron			491,52	0 		7 ²⁶
nana chromium			122,88	0 Severe		-24
			30,72	0		-22
				Abnormal		
~			7,68	•		-20
Sep 12/23			Jan 11/24 (per 1 ml)		` •	-18
			8	1.		-18 -16 -14
Non-ferrous Metal	s		offred J			-16
copper			jag 12	0-		-14
sessesses lead				0		-12
			3			-12
·				8 -		-10
			24	2-		-8
Sep 12/23			Jan 11/24			
ی Viscosity @ 40°C			۔ ت	0_4μ 6μ	14µ 21µ	38µ 71µ
,			0	Acid Number		
Abnormal			(B/H0			
Base			B 0.0	1		
			- per o o	1		
			0.0 0.0 v v v v v v v v v v v v v v v v v v			
Abnormal			0.0 ¥	0		
Abnormal			4	c 2		
Abnormal 2012 - 2012 Seb 12/21			Jan11/24	Sep 12/23		

Certificate 12367 Test Package : IND 2 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)

Diagnosed

: 22 Jan 2024

Diagnostician : Doug Bogart

Contact/Location: Service Manager - CAGFOR

US 52627

FORT MADISON, IA

Contact: Service Manager