

## **OIL ANALYSIS REPORT**

Sample Rating Trend

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### NORMAL

# FRICK HS-2 C-5 (S/N F04312FMNTHAA03)

Component Refrigeration Compressor

STELLAR 717 HT (40 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

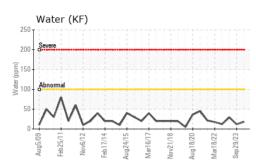
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

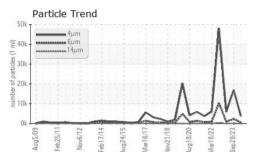
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0008134	USP0001660	USP250534
Sample Date		Client Info		29 Mar 2024	29 Sep 2023	16 Mar 2023
Machine Age	hrs	Client Info		86434	86372	85422
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	3	7	5
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	0	<1
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m		0	<1	0
Tin	ppm	ASTM D5185m	>0 >4	0	0	0
Vanadium	ppm	ASTM D5185m	~ 7	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
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		0	0	0
Magnesium	ppm	ASTM D5185m		0	0	<1
Calcium	ppm	ASTM D5185m		0	0	<1
Phosphorus	ppm	ASTM D5185m		0	0	0
Zinc	ppm	ASTM D5185m		0	5	7
Sulfur	ppm	ASTM D5185m		178	184	209
CONTAMINANTS	\$	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	2	1
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water	%	ASTM D6304	>0.01	0.002	0.001	0.003
ppm Water	ppm	ASTM D6304	>100	18	11.7	29.4
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		3762	16954	5852
Particles >6µm		ASTM D7647	>2500	538	2315	899
Particles >14µm		ASTM D7647	>320	12	35	20
Particles >21µm		ASTM D7647	>80	3	5	5
Particles >38µm		ASTM D7647	>20	0	2	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>/18/15	19/16/11	21/18/12	20/17/11
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		0.014	0.03	0.013

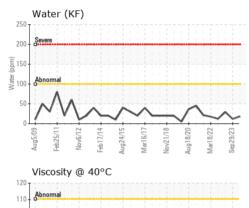
Contact/Location: TIM OROS - VERLAP Page 1 of 2

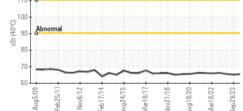


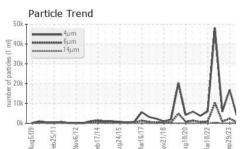
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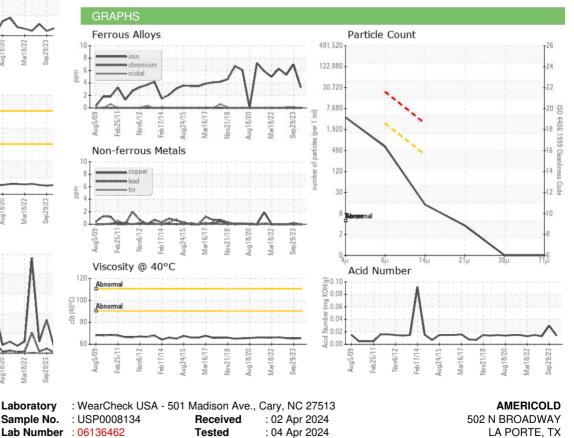






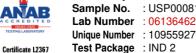
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	0.2%	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		65.6	65.2	65.6
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				a.		

Bottom



: 04 Apr 2024 - Doug Bogart





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

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