

OIL ANALYSIS REPORT

Sample Rating Trend



GEA TYSCLA 01 HS (S/N 06429-010-1-01-01)

Refrigeration Compressor

USPI ALT-68 SC (--- 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

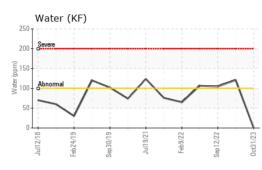
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

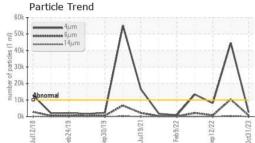
		Jul2018	Feb2019 Sep2019	JUIZUZI FEDZŪZZ SEPZŪZZ	0ct2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0002970	USP0000988	USP219394
Sample Date		Client Info		31 Oct 2023	24 Jul 2023	12 Sep 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	<1	<1
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		0	<1	0
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	<1
Copper	ppm	ASTM D5185m		0	<1	<1
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	1- 1-	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		<1	0	<1
Calcium		ASTM D5185m		<1	0	0
	ppm	ASTM D5185m		<1	<1	1
Phosphorus	ppm			0		0
Zinc Sulfur	ppm	ASTM D5185m ASTM D5185m	50	12	<1 0	7
	ppm					-
CONTAMINANTS Silicon		method	limit/base	current 2	history1 1	history2 2
	ppm	ASTM D5185m	>15		0	2
Sodium	ppm	ASTM D5185m	. 00	0		÷
Potassium	ppm	ASTM D5185m	>20	<1	0	<1
Water	%	ASTM D6304		0.00	0.012	0.010
ppm Water	ppm	ASTM D6304	>100	0.00	120.7	104.5
FLUID CLEANLIN	IESS	method	limit/base		history1	history2
Particles >4µm		ASTM D7647	>10000	2556	44612	8135
Particles >6µm		ASTM D7647	>2500	684	<u> </u>	734
Particles >14µm		ASTM D7647		64	A 340	25
Particles >21µm		ASTM D7647	>80	15	36	5
Particles >38µm		ASTM D7647	>20	1	0	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	19/17/13	▲ 23/21/16	20/17/12
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.015	0.013	0.013

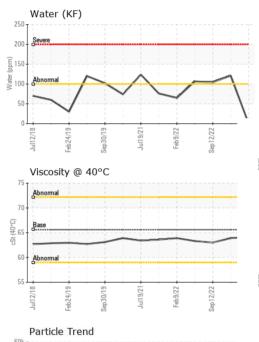
Contact/Location: BRENT SMITH - TYSCLA



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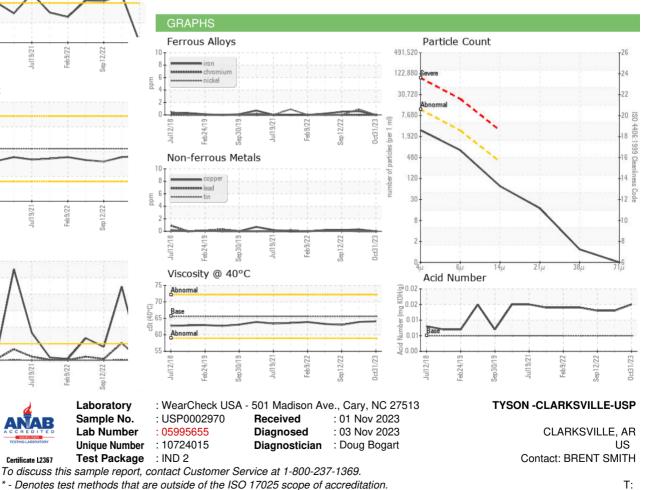




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k	14μm	$ \rangle$		٨
k - k - k -		$ \rangle$		/
k		1	(/
k- Abnorm	al	1-		N

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	NEG	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	64.1	63.9	63.0
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color						
				1		

Bottom



* - 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)

Certificate L2367

Contact/Location: BRENT SMITH - TYSCLA

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