

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

TYSJOS 9 FRK (S/N S0013CDEFLHBA3)

Refrigeration Compressor

USPI 1009-68 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

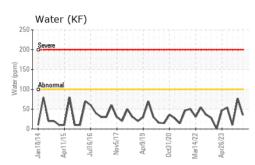
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

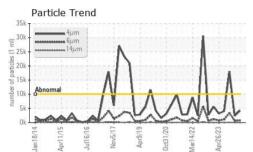
Machine Age hrs Client Info 0 227604 227079 Oil Age hrs Client Info 0 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Imit/base current history1 history1 Iron ppm ASTM D5185m >8 0 0 0 Iron ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m 2 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >2 0 0 0 Lead ppm ASTM D5185m >2 0 0 0 0 Cadmium ppm ASTM D5185m >8 0 0 0 0 Soron ppm ASTM D5185m 0 0 0 0	e hrs hrs d tus ETALS			USP0005631	11SD543533
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Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m <1 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Maganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m <1 0 0 Calcium ppm ASTM D5185m <1 0 0 Phosphorus ppm ASTM D5185m <1 2 1 Phosphorus ppm ASTM D5185m 0 0 <1 Zinc ppm ASTM D5185m 8 0 0 Sulfur ppm ASTM D5185m 50 17 12 12		- I-I		-	-
Barium ppm ASTM D5185m <1					
Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m <1 0 0 Calcium ppm ASTM D5185m 1 2 1 Phosphorus ppm ASTM D5185m 0 0 <1 Zinc ppm ASTM D5185m 8 0 0 Sulfur ppm ASTM D5185m 12 12 CONTAMINANTS method limit/base current history1 history					
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Magnesium ppm ASTM D5185m <1			-		
Calcium ppm ASTM D5185m 1 2 1 Phosphorus ppm ASTM D5185m 0 0 <1			-		
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ZincppmASTM D5185m800SulfurppmASTM D5185m50171212CONTAMINANTSmethodlimit/basecurrenthistory1history		hh			
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	ppm	ppm ASTM D5185m 50	17	12	12
	INANTS	ITAMINANTS method limit/ba	se current	history1	history2
Silicon ppm ASTM D5185m >15 <1 1 1	ppm	ppm ASTM D5185m >15	<1	1	1
Sodium ppm ASTM D5185m <1	ppm	n ppm ASTM D5185m	<1	1	1
Potassium ppm ASTM D5185m >20 <1	ppm	sium ppm ASTM D5185m >20	<1	0	0
Water % ASTM D6304 >0.01 0.003 0.007 0.001	%	% ASTM D6304 >0.01	0.003	0.007	0.001
ppm Water ppm ASTM D6304 >100 35 77 10	ppm	/ater ppm ASTM D6304 >100	35	77	10
FLUID CLEANLINESS method limit/base current history1 history	EANLINESS	D CLEANLINESS method limit/ba	se current	history1	history2
Particles >4μm ASTM D7647 >10000 4194 2394 18088	μm	es >4μm ASTM D7647 >10000	4194	2394	18088
Particles >6μm ASTM D7647 >2500 748 625 3419	μm	es >6μm ASTM D7647 >2500	748	625	93419
Particles >14μm ASTM D7647 >320 24 35 81	4µm	es >14μm ASTM D7647 >320	24	35	81
Particles >21μm ASTM D7647 >80 4 7 9	1µm	es >21μm ASTM D7647 >80	4	7	9
Particles >38μm ASTM D7647 >20 0 1 1	8µm	es >38μm ASTM D7647 >20	0	1	1
Particles >71μm ASTM D7647 >4 0 0 0	1µm	es >71µm ASTM D7647 >4	0	0	0
Oil Cleanliness ISO 4406 (c) >20/18/15 19/17/12 18/16/12 21/19/14	ess	anliness ISO 4406 (c) >20/18/1	5 19/17/12	18/16/12	21/19/14
FLUID DEGRADATION method limit/base current history1 history		D DEGRADATION	se current	history1	history2
Acid Number (AN) mg KOH/g ASTM D974 0.005 0.014 0.014 0.014	GRADATION	umber (AN) mg KOH/g ASTM D974 0.005	0.014	0.014	0.014

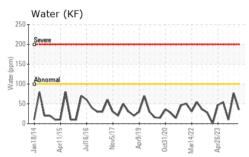
Contact/Location: RICK DUVALL - TYSJOSPRO Page 1 of 2

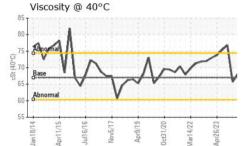


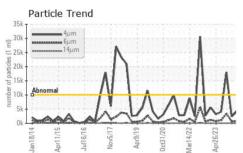
OIL ANALYSIS REPORT



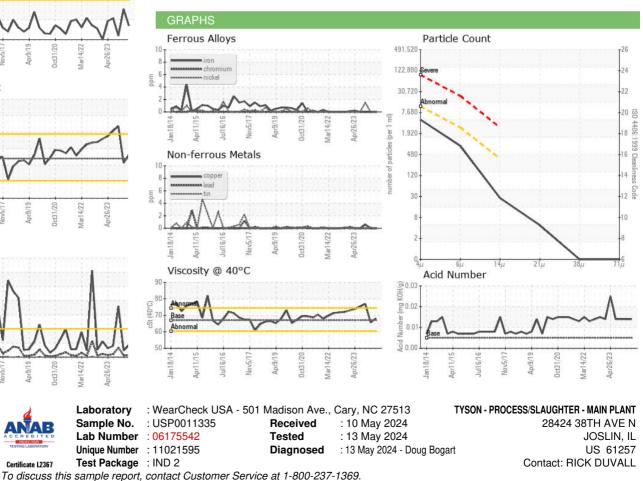








VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	67	68.0	65.7	76.8
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color				•		
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)

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