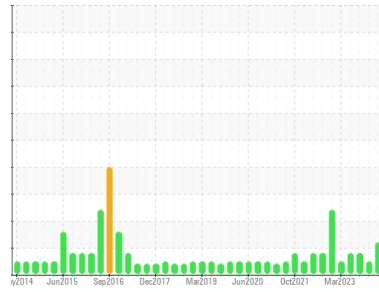




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
FRICK TYSCUM1-15 FRK (S/N TDSH233L23002F)
 Component
Refrigeration Compressor
 Fluid
USPI ALT-68 SC (--- QTS)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

An increase in the iron level is noted.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	USP0012424	USP0006889	USP0002711
Sample Date	Client Info	09 Jun 2024	15 Feb 2024	23 Oct 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	NORMAL	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >8	▲ 48	25	17
Chromium	ppm	ASTM D5185m >2	0	0	0
Nickel	ppm	ASTM D5185m	<1	<1	1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >3	0	0	0
Lead	ppm	ASTM D5185m >2	0	<1	0
Copper	ppm	ASTM D5185m >8	0	0	0
Tin	ppm	ASTM D5185m >4	0	<1	0
Vanadium	ppm	ASTM D5185m	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	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m	<1	1	0
Calcium	ppm	ASTM D5185m	0	0	0
Phosphorus	ppm	ASTM D5185m	<1	0	<1
Zinc	ppm	ASTM D5185m	0	0	0
Sulfur	ppm	ASTM D5185m 50	39	12	7

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	2	1	1
Sodium	ppm	ASTM D5185m	1	<1	0
Potassium	ppm	ASTM D5185m >20	2	1	1
Water	%	ASTM D6304 >0.01	0.008	0.008	0.004
ppm Water	ppm	ASTM D6304 >100	81	81	44.5

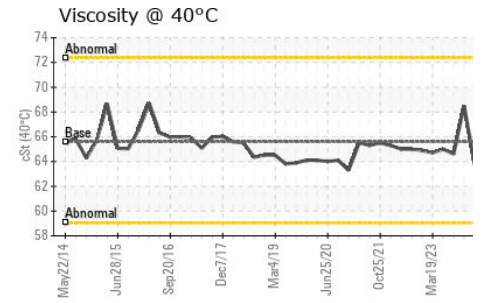
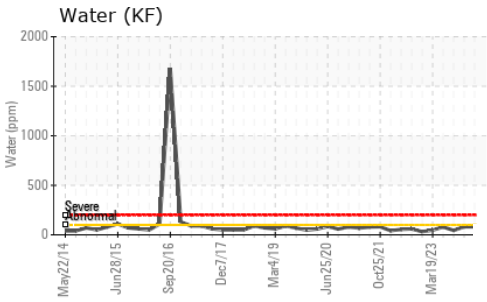
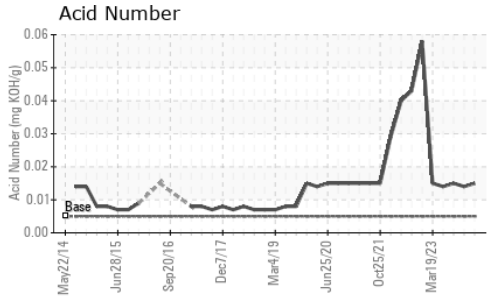
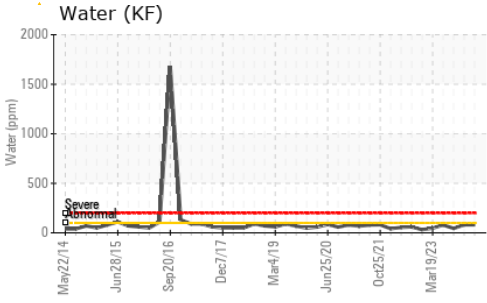
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	---	8233	14025
Particles >6µm	ASTM D7647 >2500	---	1783	● 3927
Particles >14µm	ASTM D7647 >320	---	49	147
Particles >21µm	ASTM D7647 >80	---	8	22
Particles >38µm	ASTM D7647 >20	---	0	0
Particles >71µm	ASTM D7647 >4	---	0	0
Oil Cleanliness	ISO 4406 (c) >--/18/15	---	20/18/13	● 21/19/14

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	0.015	0.014	0.015

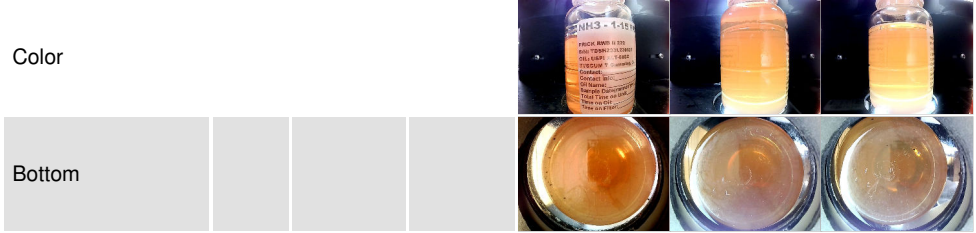
OIL ANALYSIS REPORT



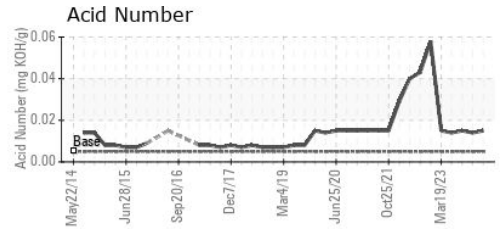
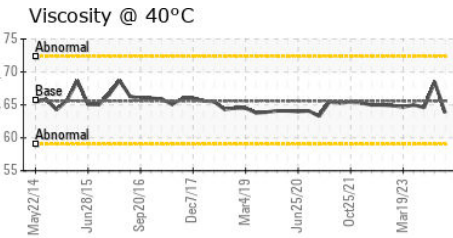
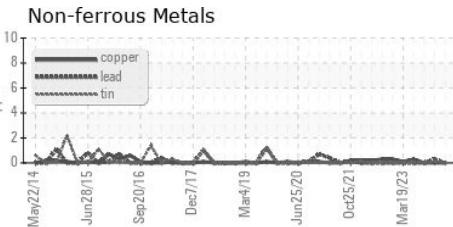
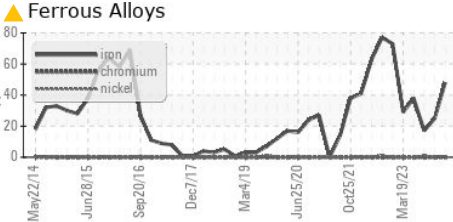
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	63.8	68.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012424
Lab Number : 06205543
Unique Number : 11073004
Test Package : IND 2

Received : 10 Jun 2024
Tested : 14 Jun 2024
Diagnosed : 14 Jun 2024 - Doug Bogart

TYSON - CUMMING- USP
 CUMMING, GA
 US 30130
 Contact: BRENT SMITH

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)

T: (402)423-6375
 F: (402)423-6661