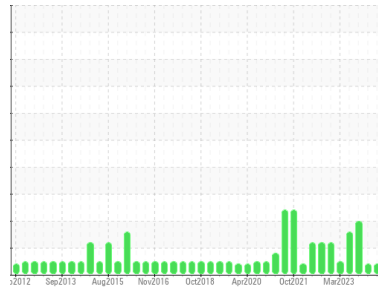




OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
FES (GEA) FES 7 (S/N V-1327)
Component
Refrigeration Compressor
Fluid
USPI 1009-68 SC (--- QTS)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

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			USP0012288	USP0006463	USP0007057
Sample Date	Client Info			14 Jul 2024	23 Apr 2024	07 Feb 2024
Machine Age	hrs	Client Info		0	0	1407
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<1	<1	9
Chromium	ppm	ASTM D5185m	>2	0	<1	0
Nickel	ppm	ASTM D5185m		<1	1	0
Titanium	ppm	ASTM D5185m		0	<1	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	<1	<1
Tin	ppm	ASTM D5185m	>4	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	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	<1	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	<1	0
Calcium	ppm	ASTM D5185m		0	0	<1
Phosphorus	ppm	ASTM D5185m		0	0	0
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m	50	0	0	4

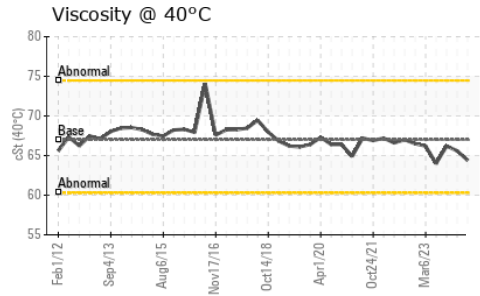
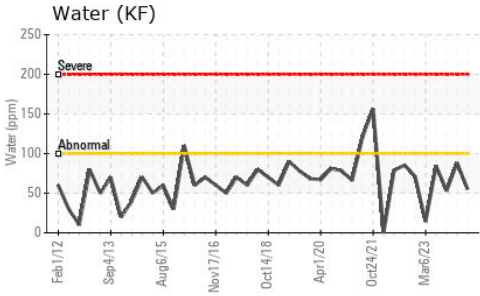
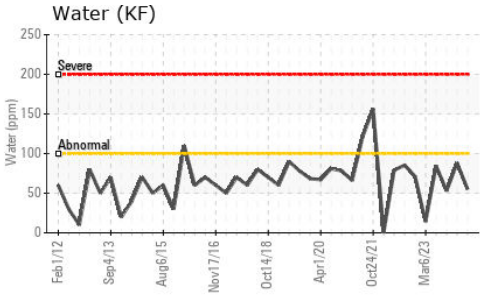
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	1	2
Sodium	ppm	ASTM D5185m		<1	<1	0
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water	%	ASTM D6304	>0.01	0.005	0.008	0.005
ppm Water	ppm	ASTM D6304	>100	55	88	53

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	---	---	▲ 73165
Particles >6µm		ASTM D7647	>2500	---	---	▲ 22819
Particles >14µm		ASTM D7647	>320	---	---	▲ 856
Particles >21µm		ASTM D7647	>80	---	---	▲ 129
Particles >38µm		ASTM D7647	>20	---	---	1
Particles >71µm		ASTM D7647	>4	---	---	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	---	---	▲ 23/22/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.012	0.015



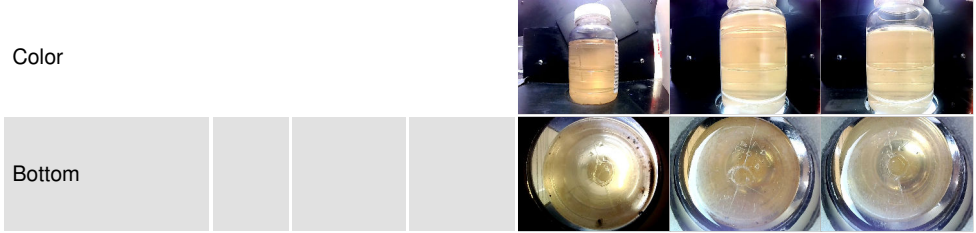
OIL ANALYSIS REPORT



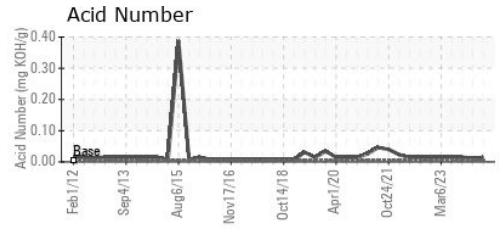
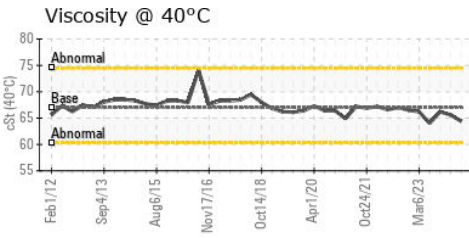
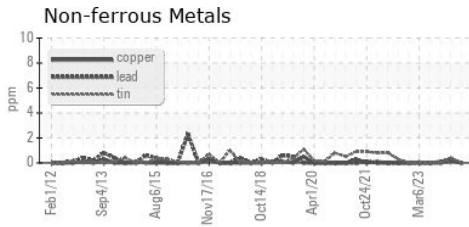
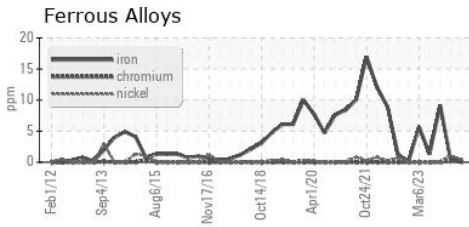
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 67	64.4	65.6	66.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012288 **Received** : 15 Jul 2024
Lab Number : **06236058** **Tested** : 16 Jul 2024
Unique Number : 11124892 **Diagnosed** : 16 Jul 2024 - Doug Bogart
Test Package : IND 2

TYSON RF-DALLAS-USP
 4114 MINT WAY
 DALLAS, TX
 US 75237
 Contact: BRIAN WILBOURN
 brian.wilbourn@tyson.com
 T: (214)331-3264
 F:

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)