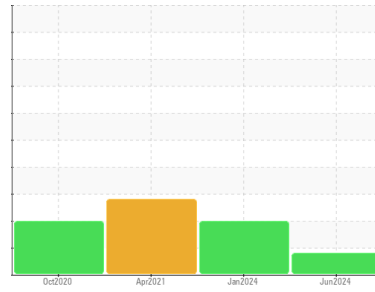




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
SEW EURODRIVE AERO FREEZER 10 (S/N S432704)
 Component
Gearbox
 Fluid
USPI 5100 FG GEAR 220 LT (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) 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		USPM37681	USPM30756	USP222282
Sample Date	Client Info		08 Jun 2024	28 Jan 2024	01 Apr 2021
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			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	53	▲ 206	29
Chromium	ppm	ASTM D5185m	>15	<1	2	<1
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	0	0
Lead	ppm	ASTM D5185m	>100	0	0	<1
Copper	ppm	ASTM D5185m	>200	0	<1	<1
Tin	ppm	ASTM D5185m	>25	0	0	0
Antimony	ppm	ASTM D5185m	>5	---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	0	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		<1	2	<1
Magnesium	ppm	ASTM D5185m		<1	0	0
Calcium	ppm	ASTM D5185m		3	0	0
Phosphorus	ppm	ASTM D5185m		726	671	648
Zinc	ppm	ASTM D5185m		6	0	0
Sulfur	ppm	ASTM D5185m		688	549	516

CONTAMINANTS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	3	4	4
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	1	0	0
Water	%	ASTM D6304	>0.2	0.064	0.008	0.078
ppm Water	ppm	ASTM D6304	>2000	640	82	780

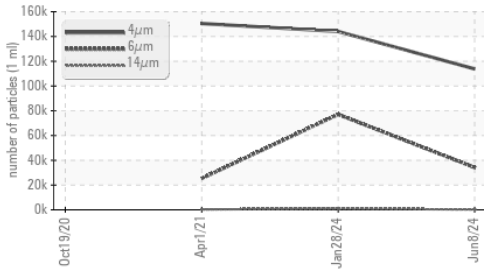
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		113794	144021	150458
Particles >6µm	ASTM D7647	>2500	▲ 34207	▲ 77098	▲ 25386
Particles >14µm	ASTM D7647	>320	234	▲ 886	306
Particles >21µm	ASTM D7647	>80	11	57	35
Particles >38µm	ASTM D7647	>20	3	0	4
Particles >71µm	ASTM D7647	>4	1	0	1
Oil Cleanliness	ISO 4406 (c)	>--/18/15	▲ 24/22/15	▲ 24/23/17	▲ 24/22/15

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	0.67	0.768

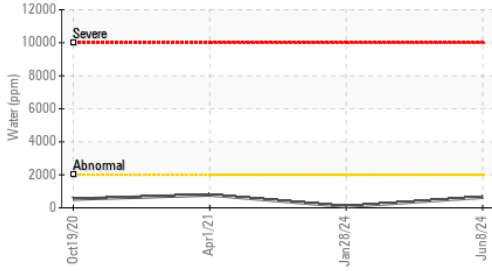


OIL ANALYSIS REPORT

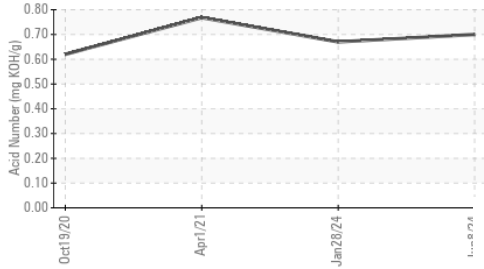
Particle Trend



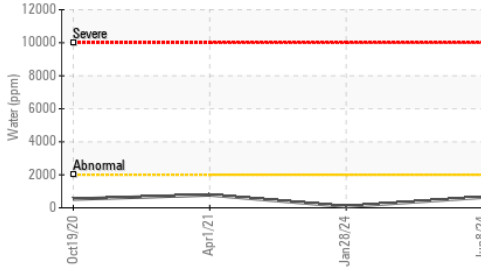
Water (KF)



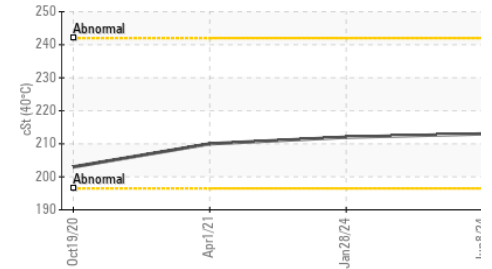
Acid Number



Water (KF)



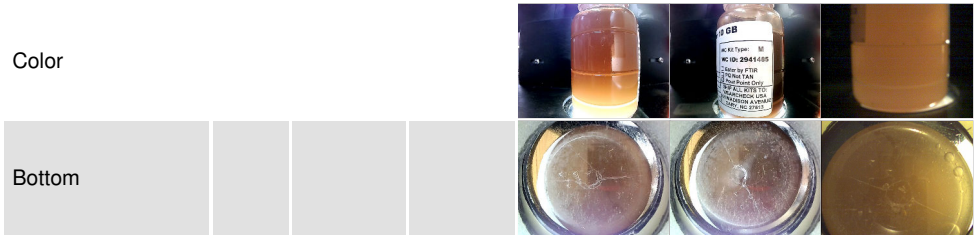
Viscosity @ 40°C



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	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	NEG
Free Water	scalar	*Visual		NEG	1.0

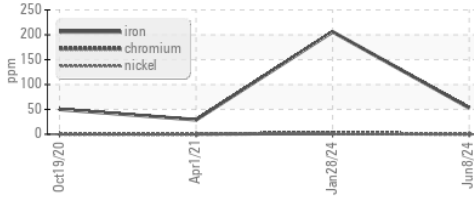
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213	212	210

SAMPLE IMAGES	method	limit/base	current	history1	history2
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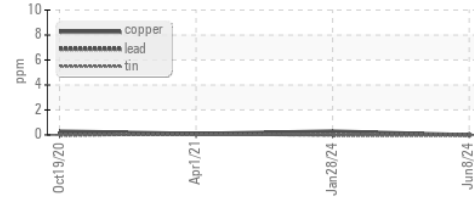


GRAPHS

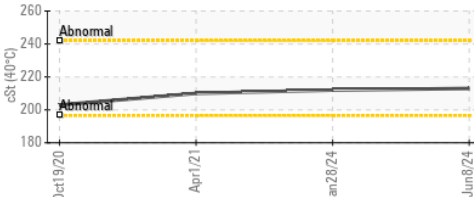
Ferrous Alloys



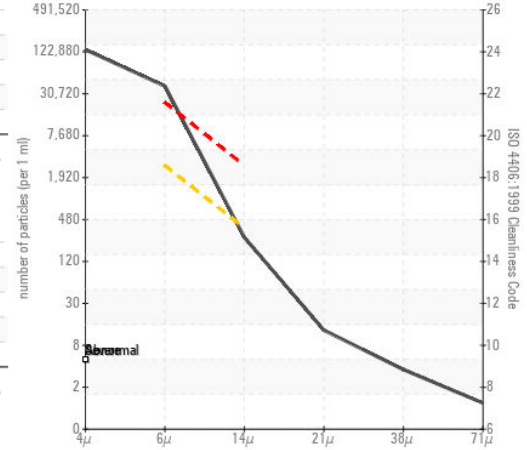
Non-ferrous Metals



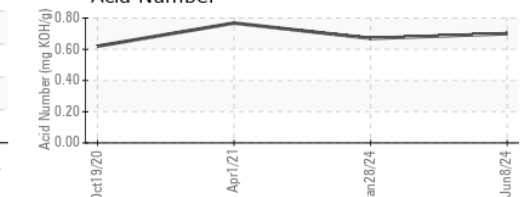
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM37681
Lab Number : 06208287
Unique Number : 11075748
Test Package : IND 2

Received : 12 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 20 Jun 2024 - Doug Bogart

TYSON-DARDANELLE-USP

DARDANELLE, AR

US

Contact: SERVICE MANAGER

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:

F: