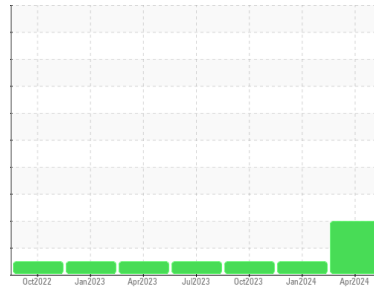




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
HASKEL CO WHEELS & BRAKE (S/N 1098-706)
 Component
Reciprocating Compressor
 Fluid
ROYCO RED (2 GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates 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		WC0869393	WC0869396	WC0749113
Sample Date	Client Info		16 Apr 2024	19 Jan 2024	09 Oct 2023
Machine Age	hrs	Client Info	0	200	200
Oil Age	hrs	Client Info	200	0	0
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	0	0	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	0
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>50	0	0	0
Tin	ppm	ASTM D5185m	>15	<1	0	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		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		1	0	4
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m		437	444	452
Zinc	ppm	ASTM D5185m		0	2	0
Sulfur	ppm	ASTM D5185m		0	105	120

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<1	0	<1
Sodium	ppm	ASTM D5185m		0	0	<1
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water	%	ASTM D6304	>0.1	NEG	NEG	0.006
ppm Water	ppm	ASTM D6304	>1000	---	---	63.3

FLUID CLEANLINESS

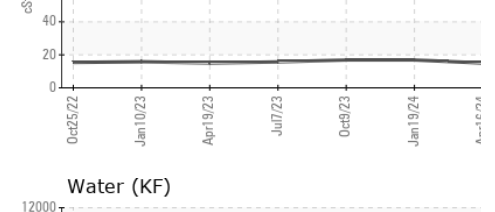
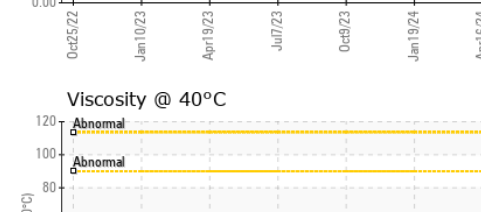
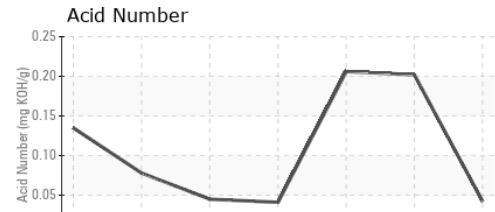
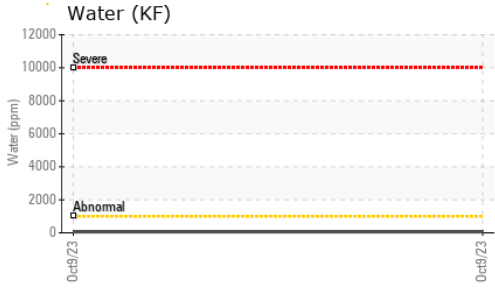
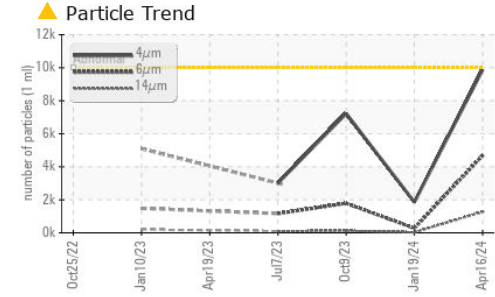
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	9874	1862	7226
Particles >6µm	ASTM D7647	>2500	▲ 4680	277	1786
Particles >14µm	ASTM D7647	>320	▲ 1271	25	121
Particles >21µm	ASTM D7647	>80	▲ 584	8	31
Particles >38µm	ASTM D7647	>20	▲ 48	0	1
Particles >71µm	ASTM D7647	>4	2	0	1
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 20/19/17	18/15/12	20/18/14

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		0.042	0.202	0.206



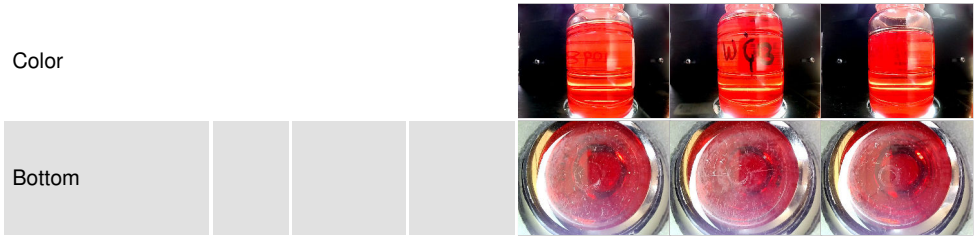
OIL ANALYSIS REPORT



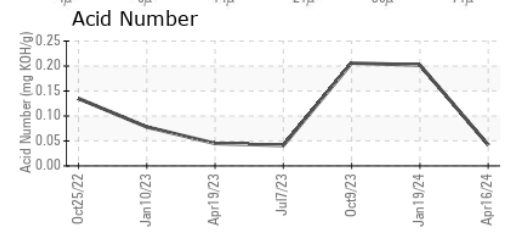
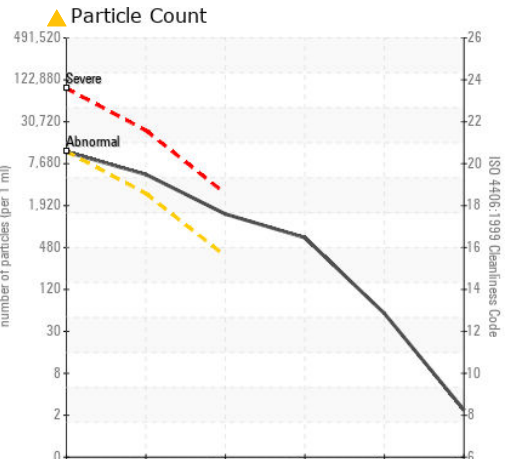
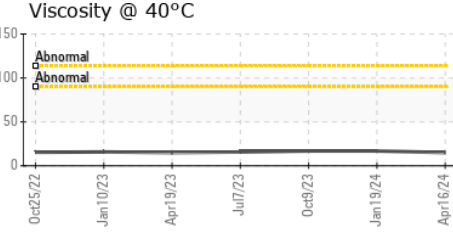
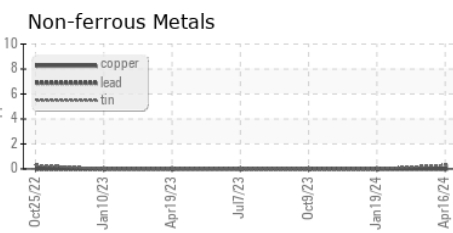
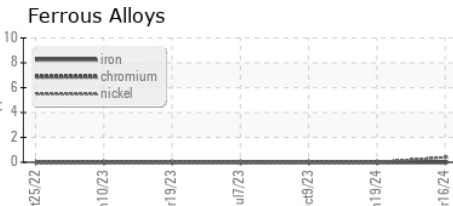
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	15.00	16.9	16.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0869393
Lab Number : 06159532
Unique Number : 10994955
Test Package : PLANT
Received : 24 Apr 2024
Tested : 26 Apr 2024
Diagnosed : 26 Apr 2024 - Jonathan Hester

AAR LANDING GEAR SERVICES
 9371 NW 100TH STREET
 MIAMI, FL
 US 33178
 Contact: SANDRA LOPEZ
 sandra.lopez@aarcorp.com
 T: (305)887-4027
 F: (305)887-6930

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)