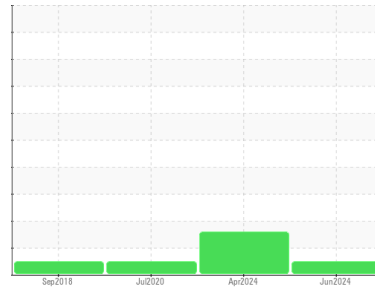




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

[1001155792]

Machine Id

BOEING 737-800 C-GLRN BOEING 737-800 A-SYSTEM (S/N 41353)

Component

A Hydraulic System

Fluid

SKYDROL LD-4 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The water content is negligible. The system cleanliness is acceptable for your target SAE AS4059 (replaces NAS 1638) cleanliness code. There is no indication of any contamination in the oil. The system and fluid cleanliness is acceptable.

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		WC0760752	WC0881026	WC0439705
Sample Date	Client Info		13 Jun 2024	28 Apr 2024	30 Jul 2020
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			NORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	2	5	2
Chromium	ppm	ASTM D5185(m) >10	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >10	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	<1	0	0
Aluminum	ppm	ASTM D5185(m) >10	0	0	0
Lead	ppm	ASTM D5185(m) >20	0	0	0
Copper	ppm	ASTM D5185(m) >20	5	8	3
Tin	ppm	ASTM D5185(m) >10	0	0	<1
Antimony	ppm	ASTM D5185(m)	0	0	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	11	19	5

ADDITIVES

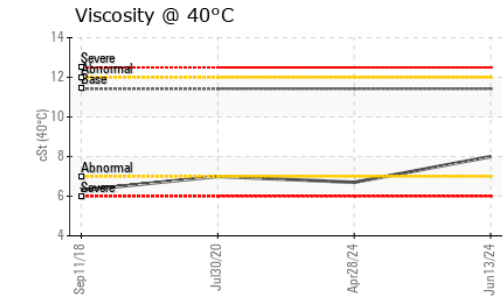
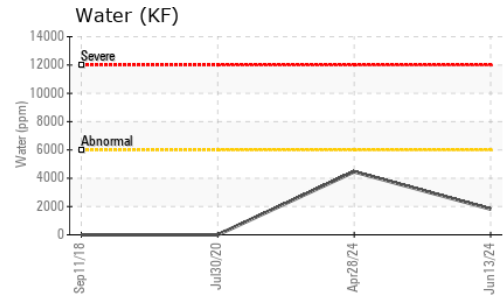
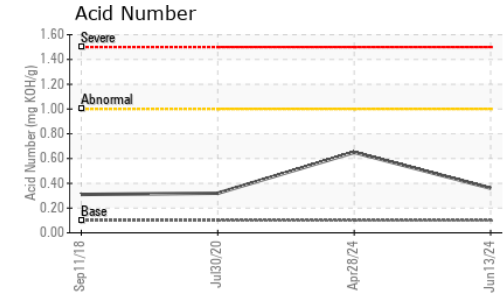
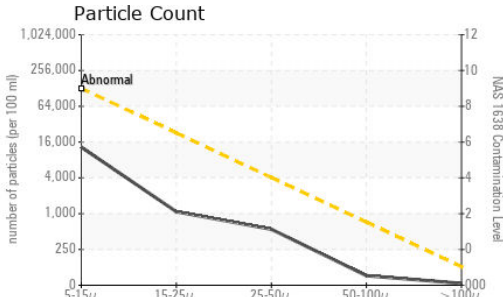
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	2	3	2
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m) 0	0	<1	<1
Calcium	ppm	ASTM D5185(m) 0	17	8	9
Phosphorus	ppm	ASTM D5185(m) 20000	43624	42106	35430
Zinc	ppm	ASTM D5185(m) 0	3	5	1
Sulfur	ppm	ASTM D5185(m) 1900	1036	1478	1401
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	1	1	3
Sodium	ppm	ASTM D5185(m)	5	3	1
Potassium	ppm	ASTM D5185(m) >20	24	22	25
Water	%	ASTM D6304* >0.6	0.181	0.445	---
ppm Water	ppm	ASTM D6304* >6000	1819	4455	---



OIL ANALYSIS REPORT



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	---	---
Particles >6µm		ASTM D7647	>128000	---	---	---
Particles >14µm		ASTM D7647	>22800	---	---	---
Particles >21µm		ASTM D7647	>4050	---	---	---
Particles >38µm		ASTM D7647	>720	---	---	---
Particles >71µm		ASTM D7647	>128	---	---	---
Oil Cleanliness		ISO 4406 (c)	>9	---	---	---
Particles 5-15µm	count	NAS 1638	>128000	13167	125781	14240
Particles 15-25µm	count	NAS 1638	>22800	1080	▲ 23800	656
Particles 25-50µm	count	NAS 1638	>4050	547	▲ 13327	907
Particles 50-100µm	count	NAS 1638	>720	67	▲ 1813	100
Particles >100µm	count	NAS 1638	>128	13	▲ 240	28
NAS 1638	Class	NAS 1638	>9	7	11	7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.10	0.36	0.65	0.32

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	VLITE	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*	>0.6	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	11.42	8	6.7	7.0

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0760752 **Received** : 14 Jun 2024
Lab Number : **02642191** **Tested** : 19 Jun 2024
Unique Number : 5799730 **Diagnosed** : 19 Jun 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: KF, PrtCount, TAN Man)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

SUNWING AIRLINES
 44 FASKEN DRIVE, UNIT 12/13
 ETOBICOKE, ON
 CA M9W 5M8
 Contact: Geoff Carroll
 gcarroll@flysunwing.com
 T: (416)802-9643
 F: (416)640-1595