



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

[TC29-002-00.SW]

Machine Id

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

Component

B Hydraulic System

Fluid

SKYDROL LD-4 (--- GAL)

## RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0881042	WC0439704	WC986673
Sample Date		Client Info		28 May 2024	30 Jul 2020	11 Sep 2018
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	3	3	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)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	0	0	<1
Copper	ppm	ASTM D5185(m)	>20	9	5	4
Tin	ppm	ASTM D5185(m)	>10	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

## CONTAMINATION

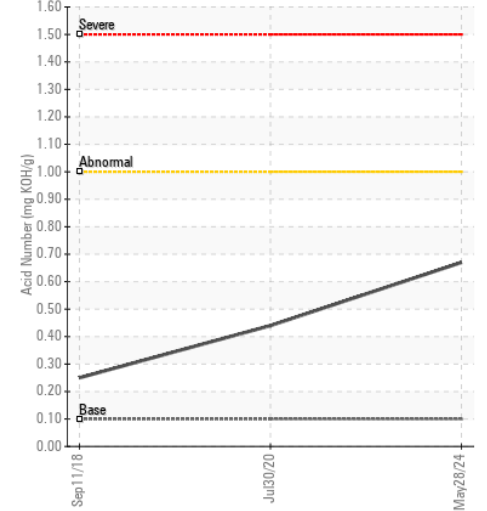
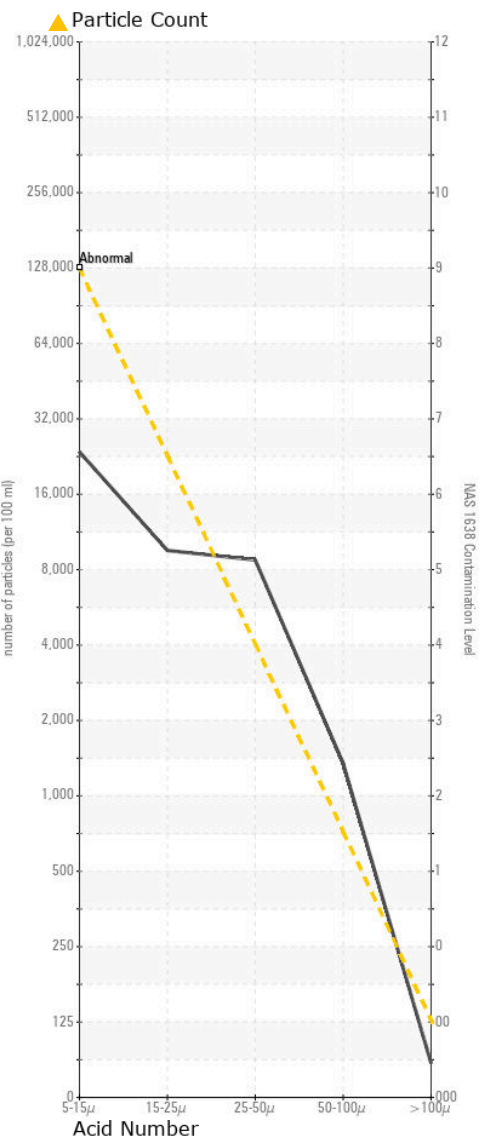
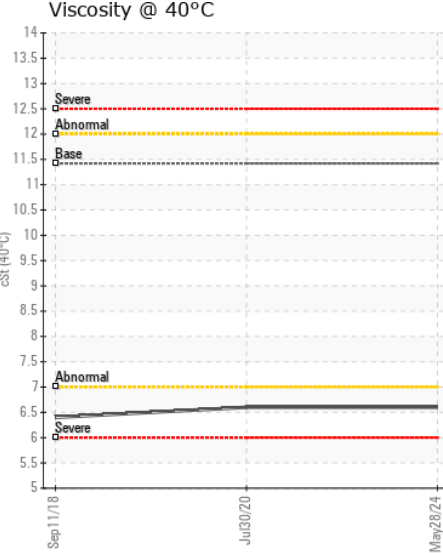
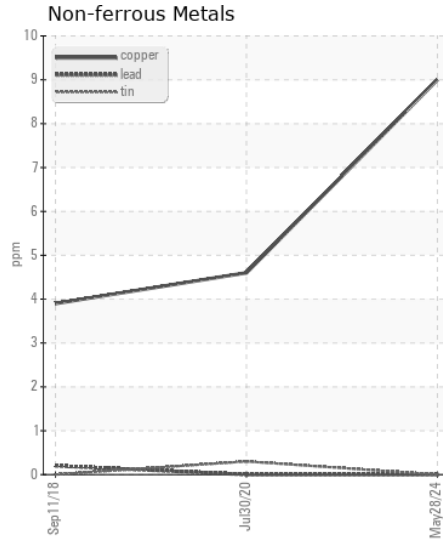
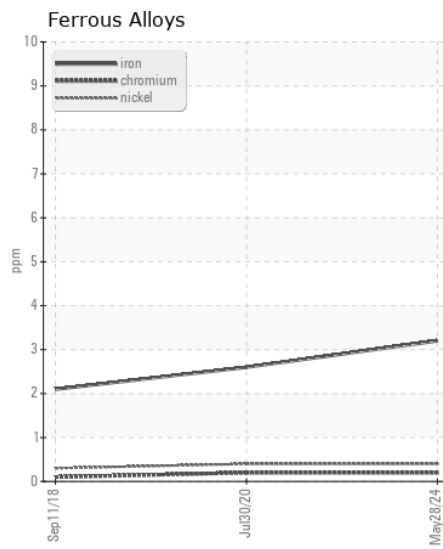
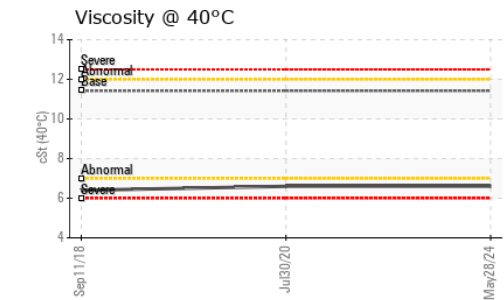
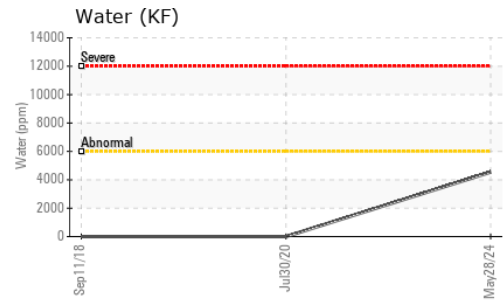
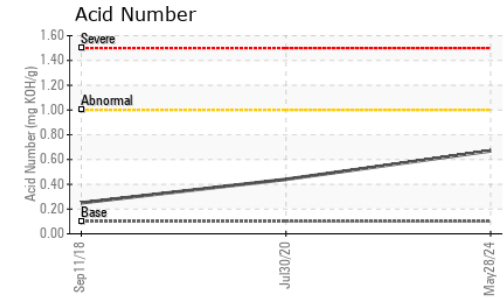
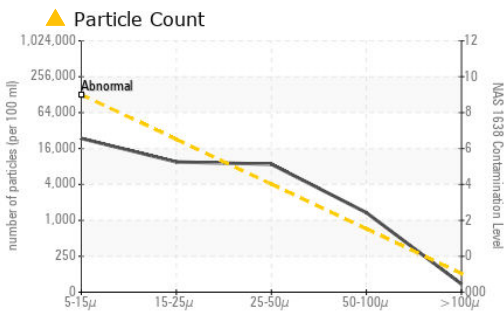
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible.

Silicon	ppm	ASTM D5185(m)	>15	2	7	1
Potassium	ppm	ASTM D5185(m)	>20	20	25	26
Water	%	ASTM D6304*	>0.6	0.454	---	---
ppm Water	ppm	ASTM D6304*	>6000	4541	---	---
Particles >4µm		ASTM D7647		---	---	862
Particles >6µm		ASTM D7647	>128000	---	---	114
Particles >14µm		ASTM D7647	>22800	---	---	15
Particles >21µm		ASTM D7647	>4050	---	---	6
Particles >38µm		ASTM D7647	>720	---	---	0
Particles >71µm		ASTM D7647	>128	---	---	0
Oil Cleanliness		ISO 4406 (c)	>9	---	---	17/14/11
Particles 5-15µm	count	NAS 1638	>128000	23638	12906	---
Particles 15-25µm	count	NAS 1638	>22800	9543	543	---
Particles 25-50µm	count	NAS 1638	>4050	8749	390	---
Particles 50-100µm	count	NAS 1638	>720	1347	60	---
Particles >100µm	count	NAS 1638	>128	57	30	---
NAS 1638	Class	NAS 1638	>9	11	7	---
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	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

## FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		4	<1	2
Boron	ppm	ASTM D5185(m)	0	6	2	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	<1
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	0	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	0	6	8	3
Phosphorus	ppm	ASTM D5185(m)	20000	42156	35424	36026
Zinc	ppm	ASTM D5185(m)	0	5	2	2
Sulfur	ppm	ASTM D5185(m)	1900	1506	1534	1610
Acid Number (AN)	mg KOH/g	ASTM D974*	0.10	0.67	0.44	0.25
Visc @ 40°C	cSt	ASTM D7279(m)	11.42	6.6	6.6	6.4



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0881042 **Received** : 29 May 2024  
**Lab Number** : 02638753 **Tested** : 10 Jun 2024  
**Unique Number** : 5787915 **Diagnosed** : 10 Jun 2024 - Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount, TAN Man )

**SUNWING AIRLINES**  
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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.