IND II

WEAR CHECK

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 A-SYSTEM (S/N 41353)
Component
A 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.

WEAR

All component wear rates are normal.

CONTAMINATION

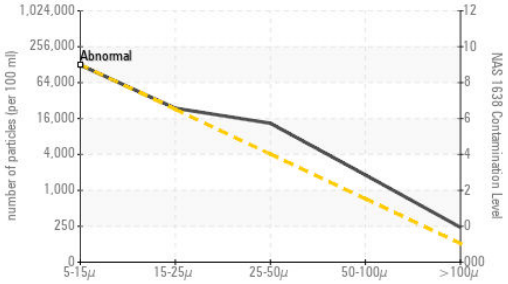
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible. The system cleanliness is above the acceptable limit for the target SAE AS4059 (replaces NAS 1638) cleanliness code.

FLUID CONDITION

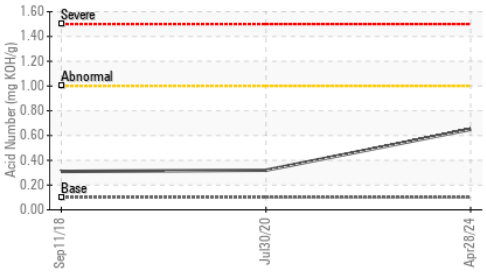
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0881026	WC0439705	WC986674
Sample Date		Client Info		28 Apr 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
Iron	ppm	ASTM D5185(m)	>20	5	2	3
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	0	0	<1
Lead	ppm	ASTM D5185(m)	>20	0	0	<1
Copper	ppm	ASTM D5185(m)	>20	8	3	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
Silicon	ppm	ASTM D5185(m)	>15	1	3	1
Potassium	ppm	ASTM D5185(m)	>20	22	25	25
Water	%	ASTM D6304*	>0.6	0.445	---	---
ppm Water	ppm	ASTM D6304*	>6000	4455	---	---
Particles >4µm		ASTM D7647		---	---	1236
Particles >6µm		ASTM D7647	>128000	---	---	106
Particles >14µm		ASTM D7647	>22800	---	---	10
Particles >21µm		ASTM D7647	>4050	---	---	3
Particles >38µm		ASTM D7647	>720	---	---	0
Particles >71µm		ASTM D7647	>128	---	---	0
Oil Cleanliness		ISO 4406 (c)	>9	---	---	17/14/10
Particles 5-15µm	count	NAS 1638	>128000	125781	14240	---
Particles 15-25µm	count	NAS 1638	>22800	▲ 23800	656	---
Particles 25-50µm	count	NAS 1638	>4050	▲ 13327	907	---
Particles 50-100µm	count	NAS 1638	>720	▲ 1813	100	---
Particles >100µm	count	NAS 1638	>128	▲ 240	28	---
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
Sodium	ppm	ASTM D5185(m)		3	1	2
Boron	ppm	ASTM D5185(m)	0	3	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	8	9	3
Phosphorus	ppm	ASTM D5185(m)	20000	42106	35430	36140
Zinc	ppm	ASTM D5185(m)	0	5	1	2
Sulfur	ppm	ASTM D5185(m)	1900	1478	1401	1588
Acid Number (AN)	mg KOH/g	ASTM D974*	0.10	0.65	0.32	0.31
Visc @ 40°C	cSt	ASTM D7279(m)	11.42	6.7	7.0	6.3

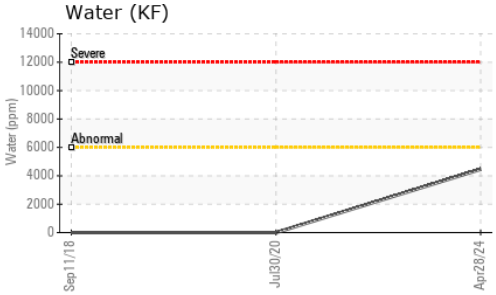
Particle Count



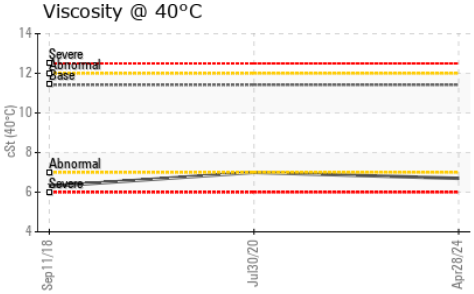
Acid Number



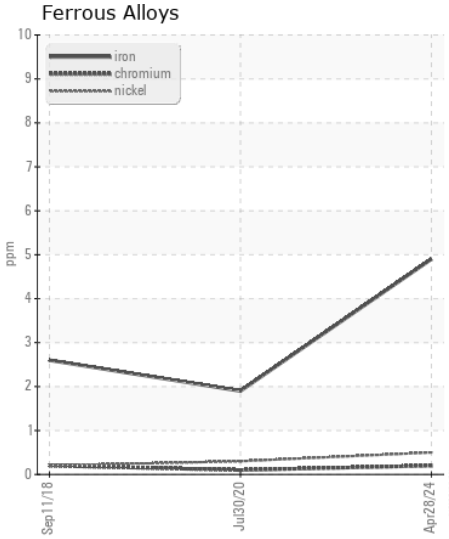
Water (KF)



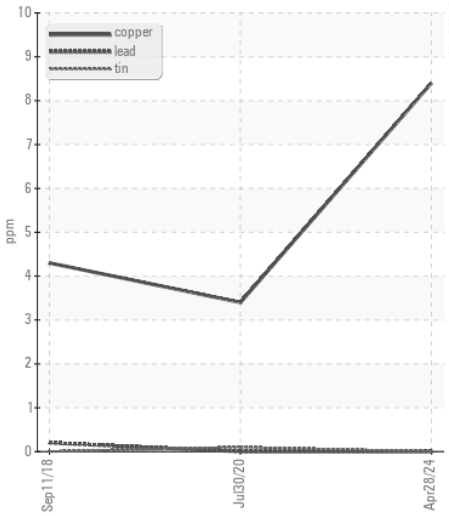
Viscosity @ 40°C



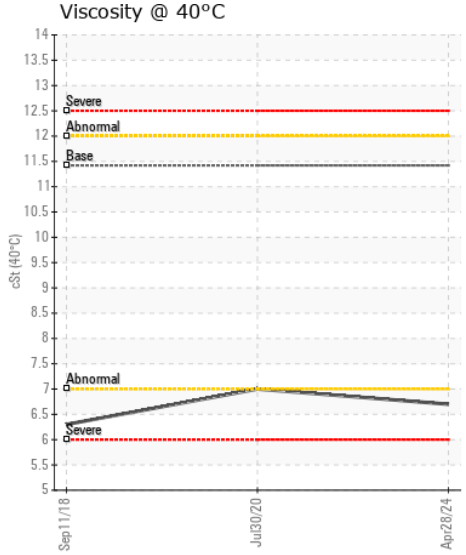
Ferrous Alloys



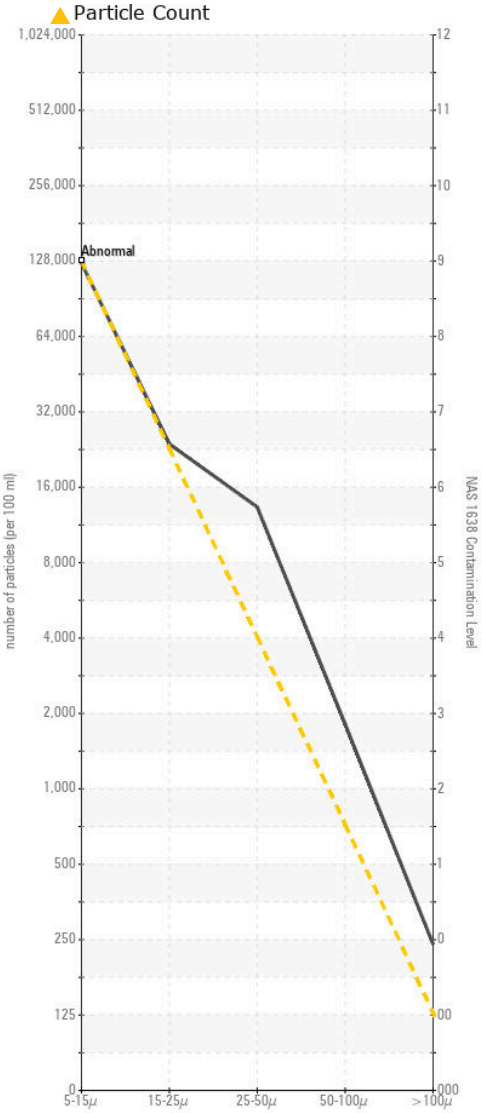
Non-ferrous Metals



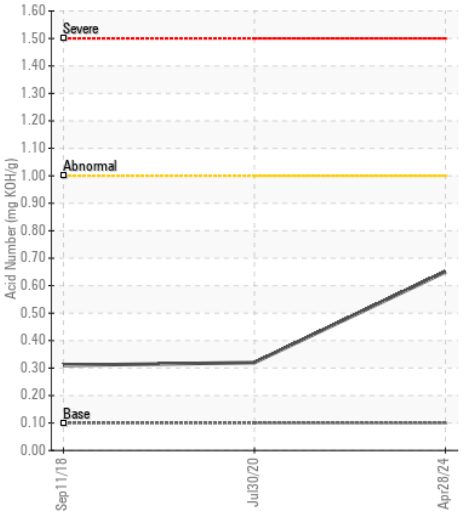
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0881026 **Received** : 29 May 2024
Lab Number : 02638752 **Tested** : 07 Jun 2024
Unique Number : 5787914 **Diagnosed** : 10 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.

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