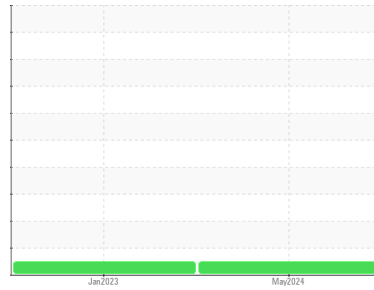




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

88-19

Machine Id

Manipulator Cell 130 Z (S/N SC006898)

Component

Gearbox

Fluid

MOBIL MOBILGEAR 600 XP 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination 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			WC0910137	WC0701617	---
Sample Date	Client Info			15 May 2024	03 Jan 2023	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		19	15	---
Iron	ppm	ASTM D5185m	>200	35	13	---
Chromium	ppm	ASTM D5185m	>15	2	0	---
Nickel	ppm	ASTM D5185m	>15	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	2	<1	---
Lead	ppm	ASTM D5185m	>100	2	0	---
Copper	ppm	ASTM D5185m	>200	10	<1	---
Tin	ppm	ASTM D5185m	>25	1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		<1	0	---

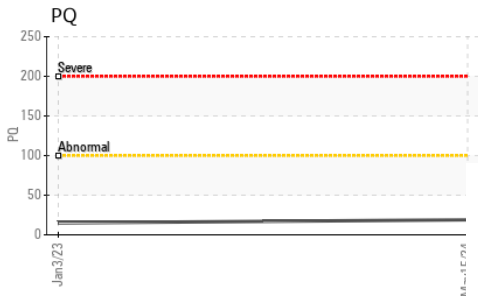
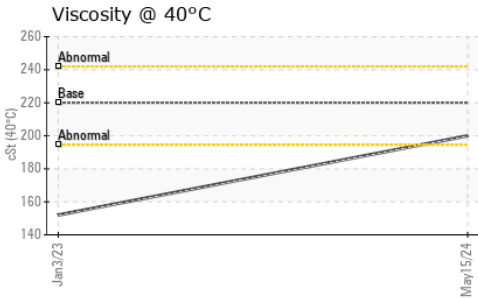
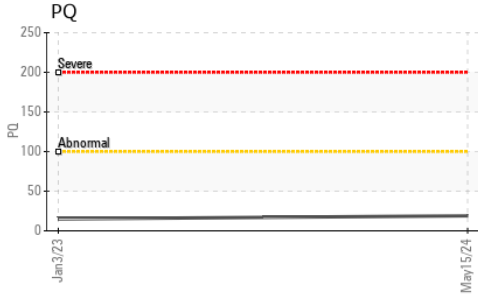
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		50	23	---
Barium	ppm	ASTM D5185m		2	0	---
Molybdenum	ppm	ASTM D5185m		<1	0	---
Manganese	ppm	ASTM D5185m		2	<1	---
Magnesium	ppm	ASTM D5185m		<1	0	---
Calcium	ppm	ASTM D5185m		2	<1	---
Phosphorus	ppm	ASTM D5185m		361	445	---
Zinc	ppm	ASTM D5185m		4	6	---
Sulfur	ppm	ASTM D5185m		10589	6921	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	2	5	---
Sodium	ppm	ASTM D5185m		2	<1	---
Potassium	ppm	ASTM D5185m	>20	2	0	---
Water	%	ASTM D6304	>0.2	NEG	NEG	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.78	0.80	---



OIL ANALYSIS REPORT



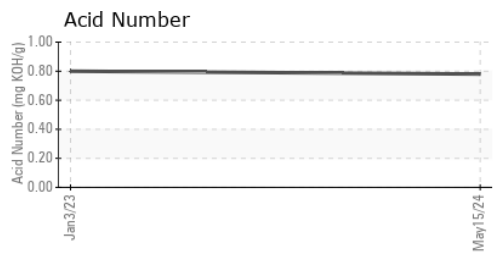
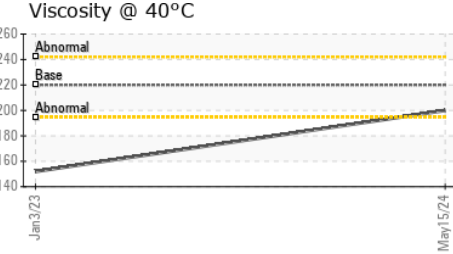
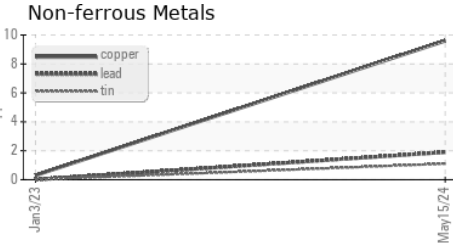
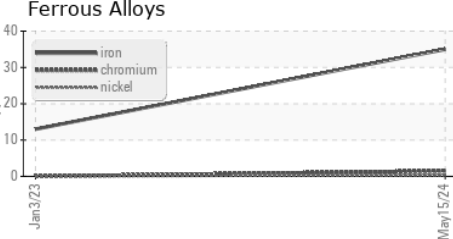
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	200	152

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color					no image
Bottom					no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0910137 **Received** : 31 May 2024
Lab Number : **06196827** **Tested** : 04 Jun 2024
Unique Number : 11058950 **Diagnosed** : 04 Jun 2024 - Jonathan Hester
Test Package : PLANT

THE BOEING COMPANY
 5400 AIRFRAME DR
 NORTH CHARLESTON, SC
 US 29418
 Contact: DAN HARRIS
 DANIEL.R.HARRIS2@BOEING.COM

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)