

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

#### Area SHELL T46 Machine Id JOY BF5781 - MICHELIN 8 Component

Gearbox

#### 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

There is no indication of any contamination in the oil.

#### Fluid Condition

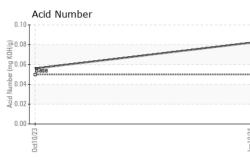
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

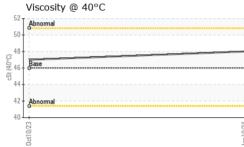
			0ct2023	Jan2024		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		UCH06062938	UCH0000231	
Sample Date		Client Info		10 Jan 2024	10 Oct 2023	
Machine Age	hrs	Client Info		0	46911	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	J	method	limit/base	current	history1	history2
Water	<u> </u>	WC Method	>0.2	NEG	NEG	
						biotom (O
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	3	<1	
Chromium	ppm	ASTM D5185m	>15	0	0	
Nickel	ppm	ASTM D5185m	>15	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	0	0	
Lead	ppm	ASTM D5185m	>100	<1	0	
Copper	ppm	ASTM D5185m	>200	12	<1	
Tin	ppm	ASTM D5185m	>25	0	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	4.0	0	0	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m	0	0	0	
Calcium	ppm	ASTM D5185m	0	0	0	
Phosphorus	ppm	ASTM D5185m	2.1	<1	0	
Zinc	ppm	ASTM D5185m	2.0	6	2	
Sulfur	ppm	ASTM D5185m	1300	55	0	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<1	0	
Sodium	ppm	ASTM D5185m		0	<1	
Potassium	ppm	ASTM D5185m	>20	0	0	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	.05	0.082	0.056	



# **OIL ANALYSIS REPORT**

VISUAL





	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	
24 -							
Jan 10/24	Appearance	scalar	*Visual	NORML	NORML	NORML	
<u>ب</u>	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
 1	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPER	RTIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	46	48.0	47.0	
	SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
 Jan10/24	Color					s and the second s	no image
	Bottom						no image
	Ferrous Alloys						
	Non-ferrous Meta	als		Jan 10/24			
		als		Jan10/24 Jan10/24			
	Non-ferrous Meta			Jan10/24	Acid Number		
	Non-ferrous Meta 15 10 10 10 10 10 10 10 10 10 10			Jan10/24			
	Non-ferrous Meta			Jan10/24			
	Non-ferrous Meta			Jan10/24			
	Non-ferrous Meta <sup>15</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup> <sup>16</sup>			Jan10/24			
	Non-ferrous Meta 15 10 10 10 10 10 10 10 10 10 10			1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 8 6 <b>Bese</b> 2		
	Non-ferrous Meta 15 10 10 10 10 10 10 10 10 10 10			Part Number (ng KOHVg) Acid Number (ng KOHVg) 0.0 0.0 0.0	0 8 6 9 9 9 9 9 9		
	Non-ferrous Meta 15 10 10 10 10 10 10 10 10 10 10			1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 8 6 <b>Bese</b> 2		
Laboratory Sample No. Lab Number Unique Number Test Package	Non-ferrous Meta 15 10 10 10 10 10 10 10 10 10 10	501 Madia Recieved Diagnost	d :17. ed :18. tician :We	try, NC 2751 Jan 2024 Jan 2024 s Davis	0 4 6 6 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7	Conta	FLUID FLO

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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