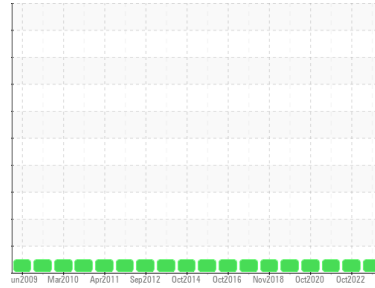




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Saugeen Shores SP-17701**  
 Machine ID  
**04K14**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL AERO HF (280 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. 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		<b>WC0835305</b>	WC0632936	WC0546388
Sample Date	Client Info		<b>20 Oct 2023</b>	17 Oct 2022	26 Oct 2021
Machine Age	yrs	Client Info	<b>15</b>	14	13
Oil Age	yrs	Client Info	<b>15</b>	14	13
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Filtered
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>50	<b>0</b>	0	0
Iron	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1
Chromium	ppm	ASTM D5185(m)	>15	<b>0</b>	0
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>0</b>	0
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1
Copper	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1
Barium	ppm	ASTM D5185(m)		<b>0</b>	0
Molybdenum	ppm	ASTM D5185(m)	0.0	<b>0</b>	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0
Magnesium	ppm	ASTM D5185(m)	0.4	<b>0</b>	0
Calcium	ppm	ASTM D5185(m)	0.0	<b>0</b>	<1
Phosphorus	ppm	ASTM D5185(m)	426	<b>388</b>	393
Zinc	ppm	ASTM D5185(m)	0.9	<b>2</b>	2
Sulfur	ppm	ASTM D5185(m)	93	<b>205</b>	179
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

## CONTAMINANTS

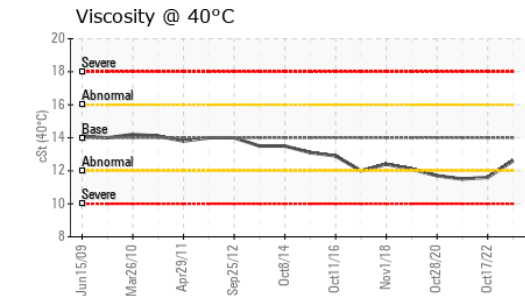
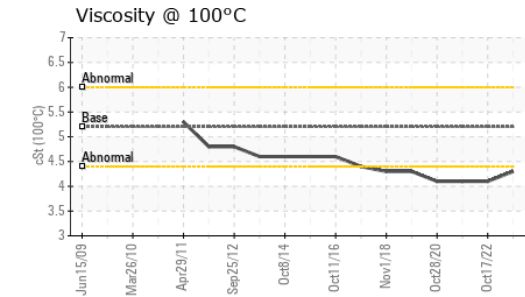
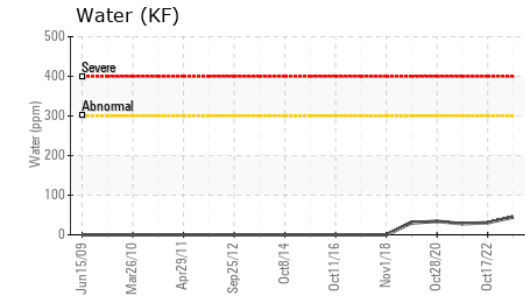
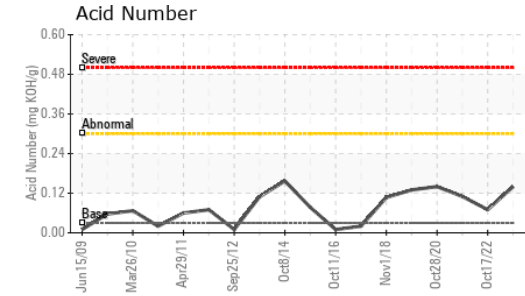
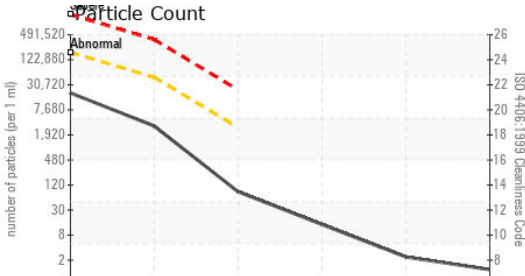
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>10	<b>2</b>	1
Sodium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1
Water	%	ASTM D6304*	>0.03	<b>0.004</b>	0.003
ppm Water	ppm	ASTM D6304*	>300	<b>44.6</b>	30.6

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		<b>0</b>	0
Nitration	Abs/cm	ASTM D7624*		<b>3.3</b>	3.7
Sulfation	Abs./1mm	ASTM D7415*		<b>48.9</b>	50.6



# OIL ANALYSIS REPORT



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Vestas American Wind Technology Inc.  
**Sample No.** : WC0835305 **Received** : 24 Oct 2023  
**Lab Number** : 02591406 **Diagnosed** : 25 Oct 2023  
**Unique Number** : 5668485 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: FT-IR, KF, KV100, PQ, TAN Man, VI )

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.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>160000	<b>16964</b>	204	315
Particles >6µm	ASTM D7647	>40000	<b>2730</b>	78	91
Particles >14µm	ASTM D7647	>2500	<b>73</b>	12	10
Particles >21µm	ASTM D7647	>640	<b>12</b>	2	3
Particles >38µm	ASTM D7647	>160	<b>2</b>	0	0
Particles >71µm	ASTM D7647	>40	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>24/22/18	<b>21/19/13</b>	15/13/11	15/14/10

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	<b>40.6</b>	41.2	40.8
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.14</b>	0.07	0.11

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	14.0	<b>12.6</b>	11.6
Visc @ 100°C	cSt	ASTM D7279(m)	5.2	<b>4.3</b>	4.1
Viscosity Index (VI)	Scale	ASTM D2270*	370	<b>298</b>	310

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

