WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

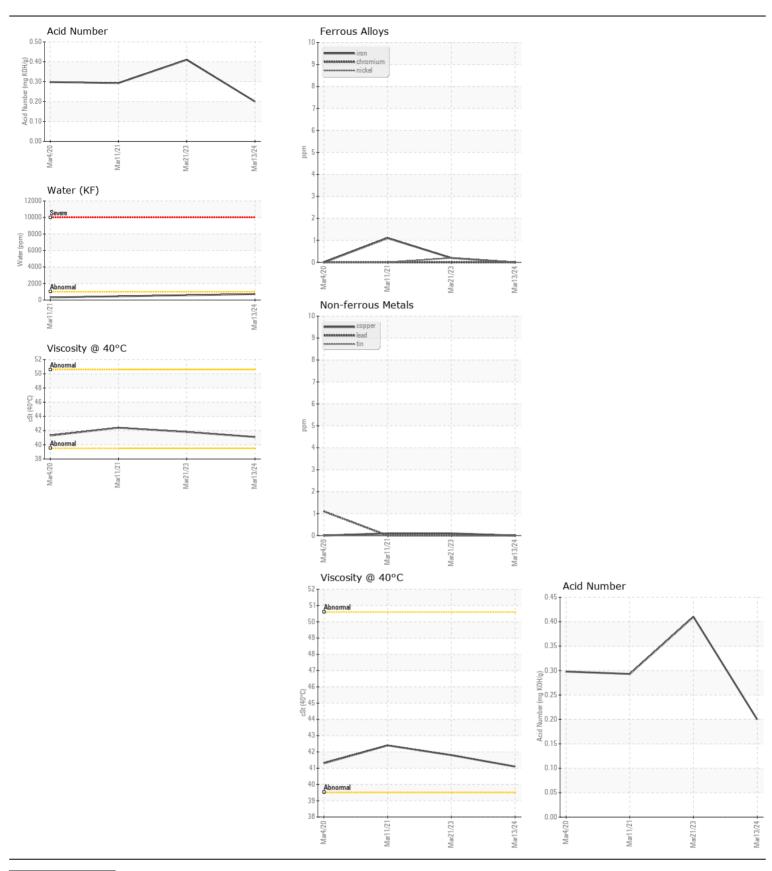
Area

**MAX AIR FG 32** 

## PALATEK 1803090002 - ENGSTRON BEAN

Component Compressor

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		UCS06123854	UCS05809078	UCS05212958
	Sample Date		Client Info		13 Mar 2024	21 Mar 2023	11 Mar 2021
	Machine Age	hrs	Client Info		21735	18263	11181
	Oil Age	hrs	Client Info		4000	4000	3000
	Filter Age	hrs	Client Info		2000	4000	3000
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	ATTENTION
WEAR	Iron	ppm	ASTM D5185m	>50	0	<1	1
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>10	0	0	0
	Nickel	ppm	ASTM D5185m		0	<1	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>25	0	0	0
	Lead	ppm	ASTM D5185m	>25	0	0	0
	Copper	ppm	ASTM D5185m	>50	0	<1	<1
	Tin	ppm	ASTM D5185m	>15	0	0	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	0	0	0
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		0	<1	0
	Water	%	ASTM D6304	>0.1	0.072		0.032
	ppm Water	ppm	ASTM D6304		720		320
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
					_		
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris Sand/Dirt	scalar scalar	*Visual	NONE	NONE NONE	NONE NONE	NONE
	Sand/Dirt	scalar scalar scalar	*Visual	NONE	NONE		
		scalar				NONE	NONE
	Sand/Dirt Appearance	scalar scalar scalar	*Visual	NONE NORML	NONE NORML	NONE NORML	NONE NORML
FI UID CONDITION	Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar	*Visual  *Visual  *Visual  *Visual	NONE NORML NORML	NONE NORML NORML 0.2%	NONE NORML NORML NEG	NONE NORML NORML 0.2%
FLUID CONDITION	Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar ppm	*Visual  *Visual  *Visual  *Visual  ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%	NONE NORML NORML NEG	NONE NORML NORML 0.2%
The AN level is acceptable for this fluid. The condition of the oil is	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar ppm	*Visual  *Visual  *Visual  *Visual  ASTM D5185m  ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 0	NONE NORML NORML NEG  1	NONE NORML NORML 0.2%
	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%  0 0	NONE NORML NORML NEG  1 0	NONE NORML NORML 0.2% 4 0
The AN level is acceptable for this fluid. The condition of the oil is	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar ppm ppm ppm	*Visual  *Visual  *Visual  *Visual  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%  0 0 0	NONE NORML NORML NEG  1 0 0	NONE NORML NORML 0.2% 4 0 0
The AN level is acceptable for this fluid. The condition of the oil is	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%  0 0 0 0	NONE NORML NORML NEG  1 0 0  0 <1	NONE NORML NORML 0.2% 4 0 0 0
The AN level is acceptable for this fluid. The condition of the oil is	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar ppm ppm ppm ppm ppm	*Visual  *Visual  *Visual  *Visual  ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%  0 0 0 0 0	NONE NORML NORML NEG  1 0 0	NONE NORML NORML 0.2% 4 0 0
The AN level is acceptable for this fluid. The condition of the oil is	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm	*Visual  *Visual  *Visual  *Visual  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%  0 0 0 0 0 0 0	NONE NORML NORML NEG  1 0 0 0 <1 2	NONE NORML NORML 0.2%  4 0 0 0 0
The AN level is acceptable for this fluid. The condition of the oil is	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	*Visual  *Visual  *Visual  *Visual  *Visual  ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%  0 0 0 0 0	NONE NORML NORML NEG  1 0 0 0 <1 2 <1	NONE NORML NORML 0.2% 4 0 0 0 0 0
The AN level is acceptable for this fluid. The condition of the oil is	Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	*Visual  *Visual  *Visual  *Visual  *Visual  ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%  0 0 0 0 0 0 439	NONE NORML NORML NEG  1 0 0 0 <1 2 <1 456	NONE NORML NORML 0.2%  4 0 0 0 0 0 452
The AN level is acceptable for this fluid. The condition of the oil is	Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm	*Visual  *Visual  *Visual  *Visual  *Visual  ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%  0 0 0 0 0 439 15	NONE NORML NORML NEG  1 0 0 0 <1 2 <1 456 17	NONE NORML NORML 0.2%  4 0 0 0 0 0 452 7
The AN level is acceptable for this fluid. The condition of the oil is	Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	*Visual  *Visual  *Visual  *Visual  *Visual  ASTM D5185m  ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2%  0 0 0 0 0 439 15 1616	NONE NORML NORML NEG  1 0 0 0 <1 2 <1 456 17 867	NONE NORML NORML 0.2%  4 0 0 0 0 452 7 446







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : UCS06123854 Lab Number : 06123854

Unique Number : 10938005 Test Package : IND 2 ( Additional Tests: KF )

Received Tested Diagnosed

: 20 Mar 2024 : 21 Mar 2024

: 22 Mar 2024 - Don Baldridge

WEST FARGO, ND US 58078 Contact: DALE K dalek@jemco-maxair.com

**JEMCO-MAXAIR** 

T: (701)281-0362

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)

Contact/Location: DALE K - UCJEMWES

F: x: