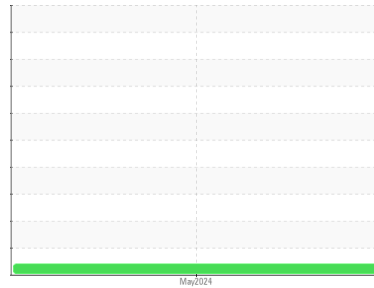




# OIL ANALYSIS REPORT

Sample Rating Trend



INSOLUBLES



Area

## 3000 NITRIC ACID PLANT

Machine Id

## VERA AIR COMPRESSOR SET (B3004)

Component

### Compressor

Fluid

### HIGH PERFORMANCE LUBRICANTS COMPRESSOR LIFE 46 (1450 GAL)

#### DIAGNOSIS

##### ▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

##### Wear

All component wear rates are normal.

##### ▲ Contamination

MPC (Membrane Patch Colorimetry) test indicates a moderate concentration of varnish present. The system cleanliness is acceptable for your target ISO 4406 cleanliness code.

##### Fluid Condition

The AN level is acceptable for this fluid. Linear Sweep Voltammetry (RULER – ASTM D6971) testing indicates normal levels of anti-oxidants present in the oil.

#### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0944453	---	---
Sample Date	Client Info		15 May 2024	---	---
Machine Age	Client Info		0	---	---
Oil Age	Client Info		0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

#### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---	---

#### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	---	---
Chromium	ppm	ASTM D5185m >10	0	---	---
Nickel	ppm	ASTM D5185m	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >25	0	---	---
Lead	ppm	ASTM D5185m >25	0	---	---
Copper	ppm	ASTM D5185m >50	1	---	---
Tin	ppm	ASTM D5185m >15	<1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

#### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	0	---	---
Magnesium	ppm	ASTM D5185m	<1	---	---
Calcium	ppm	ASTM D5185m 225	27	---	---
Phosphorus	ppm	ASTM D5185m	18	---	---
Zinc	ppm	ASTM D5185m	<1	---	---
Sulfur	ppm	ASTM D5185m 22000	20796	---	---

#### CONTAMINANTS

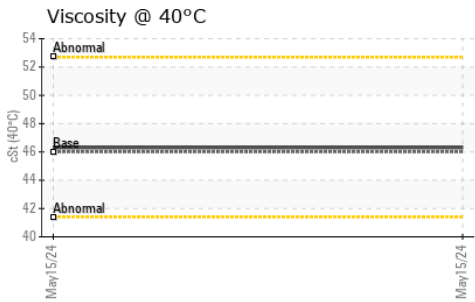
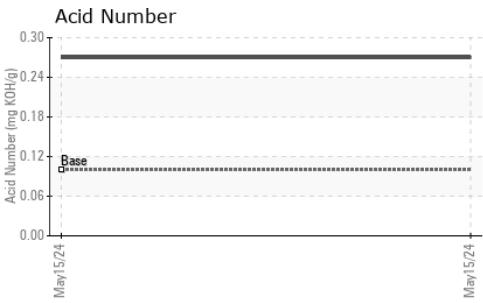
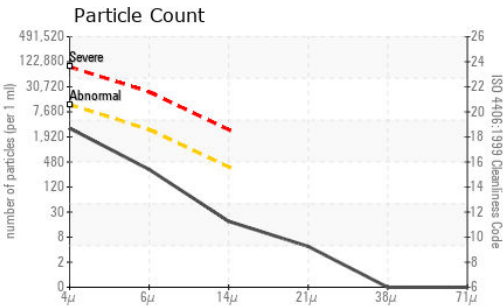
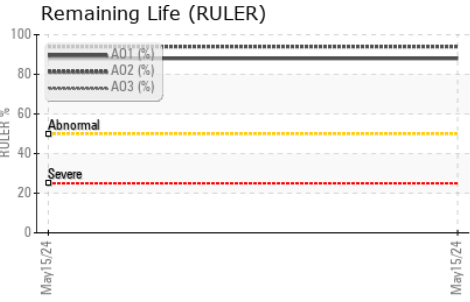
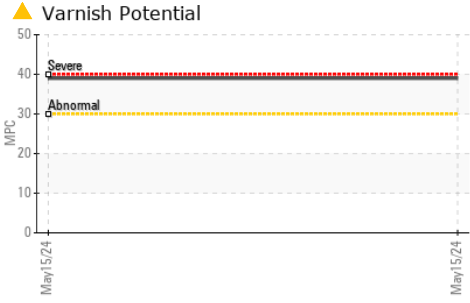
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	---	---
Sodium	ppm	ASTM D5185m	<1	---	---
Potassium	ppm	ASTM D5185m >20	0	---	---

#### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	2712	---	---
Particles >6µm	ASTM D7647	>2500	279	---	---
Particles >14µm	ASTM D7647	>320	16	---	---
Particles >21µm	ASTM D7647	>80	4	---	---
Particles >38µm	ASTM D7647	>20	0	---	---
Particles >71µm	ASTM D7647	>4	0	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	19/15/11	---	---






# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.1	<b>0.27</b>	---	---
Anti-Oxidant 1	%	ASTM D6971	<25	<b>88</b>	---	---
Anti-Oxidant 2	%	ASTM D6971	<25	<b>94</b>	---	---
MPC Varnish Potential	Scale	ASTM D7843	>15	<b>▲ 39</b>	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	---	---
Free Water	scalar	*Visual		<b>NEG</b>	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	<b>46.3</b>	---	---

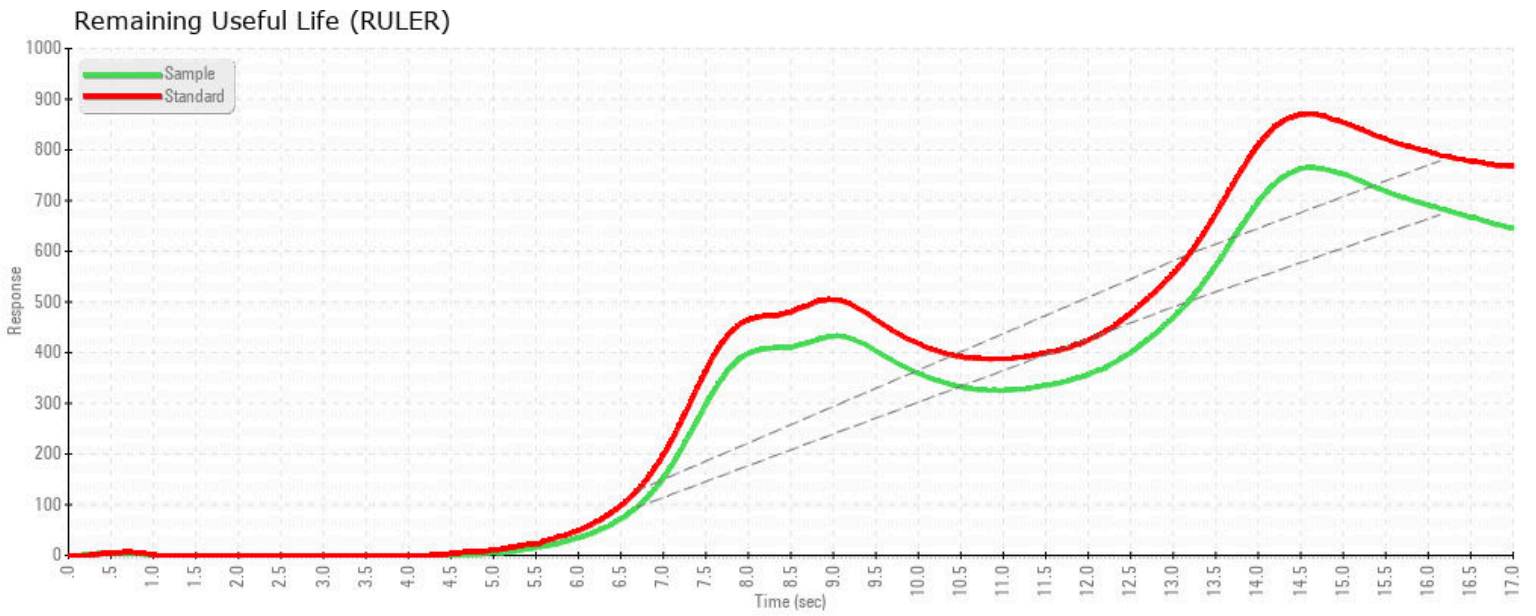
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
MPC					no image	no image



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0944453  
**Lab Number** : **06184295**  
**Unique Number** : 11035621  
**Test Package** : AOM 1  
**Received** : 20 May 2024  
**Tested** : 11 Jun 2024  
**Diagnosed** : 11 Jun 2024 - Doug Bogart

**US NITROGEN-AUSTIN POWDER**  
 471 POTTERTOWN RD  
 MIDWAY, TN  
 US 37809  
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 F:

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)



MPC (Varnish Test)



Sample Color & Clarity



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