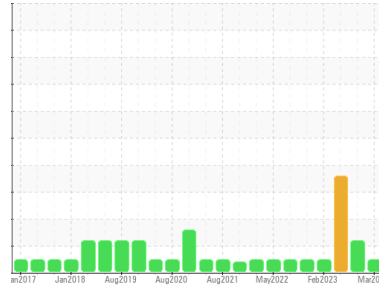




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**INGERSOLL RAND AIR 2 I/R (S/N NFF0271U05131)**

Component  
**Air Compressor**  
Fluid  
**USPI AIR 46 (--- 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. The amount and size of particulates present in the system are 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>USPM30465</b>	USPM28033	USPM24110
Sample Date	Client Info	<b>18 Mar 2024</b>	14 May 2023	20 Apr 2023
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	9
Chromium	ppm	ASTM D5185m >4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >40	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m 1	<b>4</b>	5	6
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	6
Sulfur	ppm	ASTM D5185m 0	<b>0</b>	0	9

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	2	▲ 36
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Water	%	ASTM D6304 >0.2	<b>0.049</b>	0.063	▲ 0.391
ppm Water	ppm	ASTM D6304 >2000	<b>499</b>	638.6	▲ 3910

## FLUID CLEANLINESS

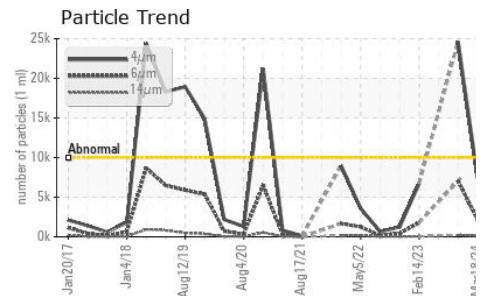
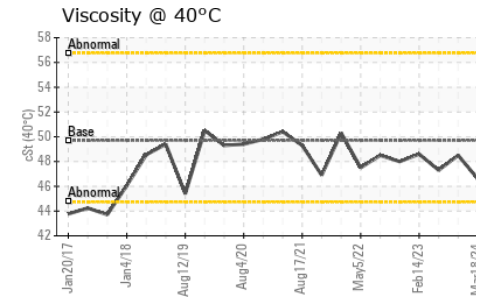
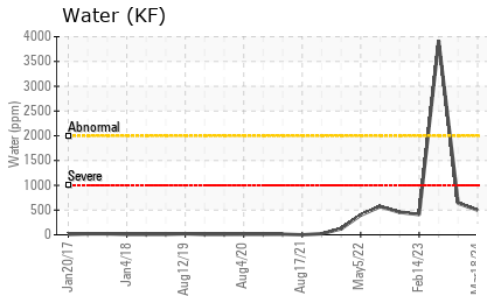
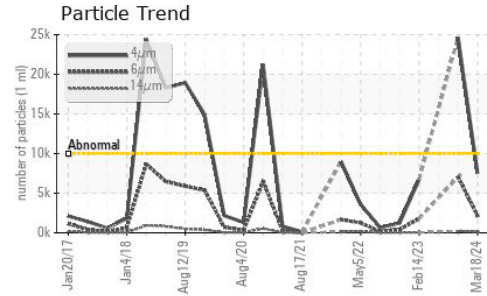
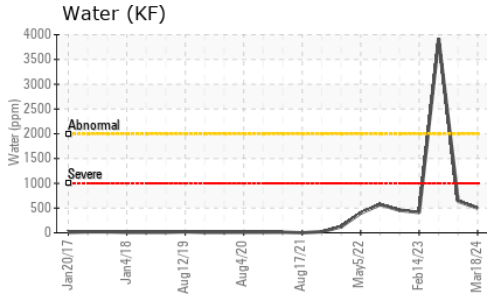
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>7502</b>	▲ 24645	---
Particles >6µm	ASTM D7647 >2500	<b>2140</b>	▲ 7046	---
Particles >14µm	ASTM D7647 >320	<b>116</b>	214	---
Particles >21µm	ASTM D7647 >80	<b>28</b>	36	---
Particles >38µm	ASTM D7647 >20	<b>1</b>	1	---
Particles >71µm	ASTM D7647 >4	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >20/18/15	<b>20/18/14</b>	▲ 22/20/15	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.25</b>	0.16	0.19



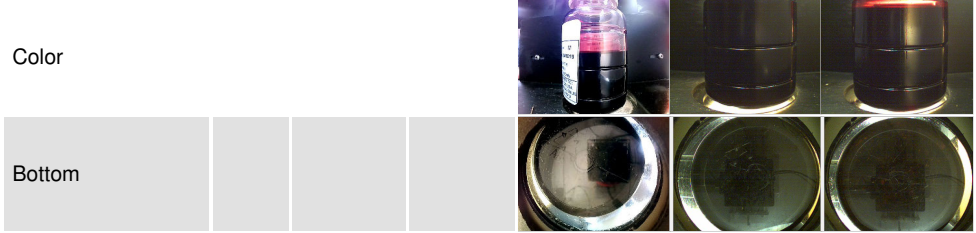
# OIL ANALYSIS REPORT



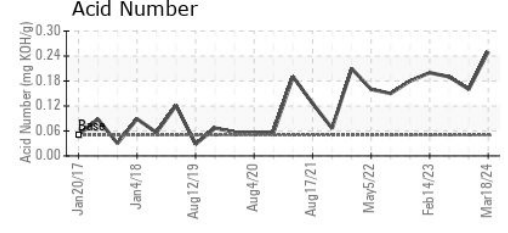
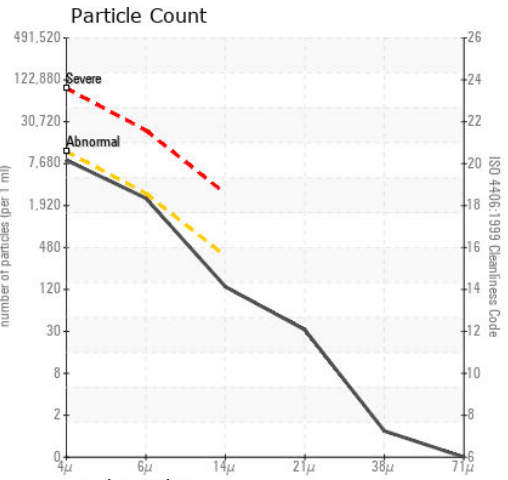
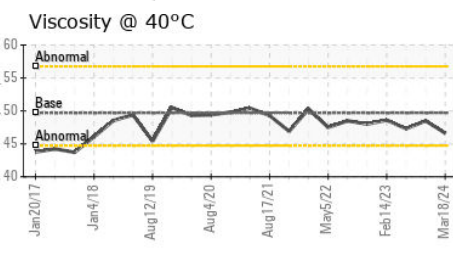
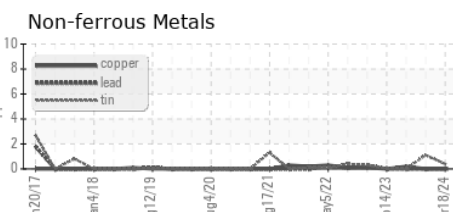
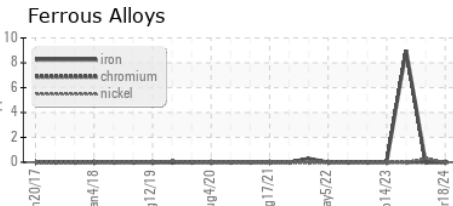
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	49.7	46.62	48.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM30465  
**Lab Number** : 06122394  
**Unique Number** : 10936545  
**Test Package** : IND 2  
**Received** : 19 Mar 2024  
**Tested** : 21 Mar 2024  
**Diagnosed** : 21 Mar 2024 - Doug Bogart

**JBS-OTTUMWA**  
 600 SOUTH IOWA AVENUE  
 OTTUMWA, IA  
 US 52501  
 Contact: LISA PIERCE  
 lisa\_pierce@cargill.com  
 T: (641)683-4741  
 F: (641)683-4731

Certificate L2367  
 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)