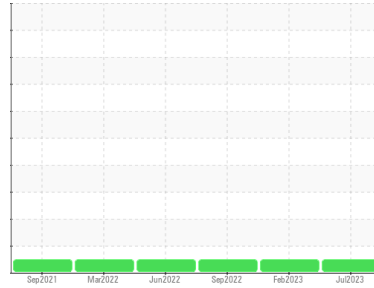




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**INGERSOLL RAND IR OIL FREE (S/N TS5242U15188)**

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>USPM25356</b>	USPM23397	USPR000887
Sample Date	Client Info		<b>18 Jul 2023</b>	23 Feb 2023	19 Sep 2022
Machine Age	hrs	Client Info	<b>33800</b>	57712	53974
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	9	<1
Chromium	ppm	ASTM D5185m >4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	<1
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	<1
Copper	ppm	ASTM D5185m >40	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m >5	<b>0</b>	0	<1
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>3</b>	70	72
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Calcium	ppm	ASTM D5185m 0	<b>&lt;1</b>	20	2
Phosphorus	ppm	ASTM D5185m 1	<b>3</b>	33	30
Zinc	ppm	ASTM D5185m 0	<b>0</b>	12	6
Sulfur	ppm	ASTM D5185m 0	<b>&lt;1</b>	126	4

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	3	2
Sodium	ppm	ASTM D5185m	<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Water	%	ASTM D6304 >0.2	<b>0.018</b>	0.038	0.048
ppm Water	ppm	ASTM D6304 >2000	<b>183.1</b>	380.6	487.5

## FLUID CLEANLINESS

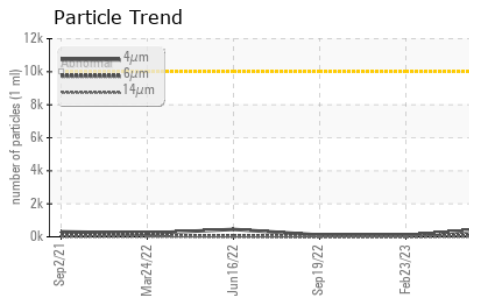
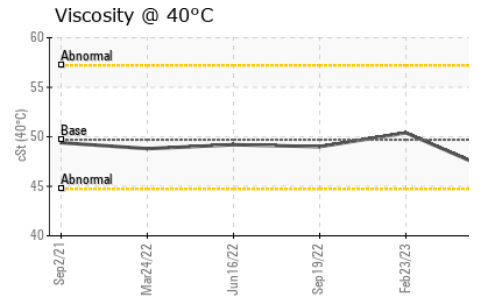
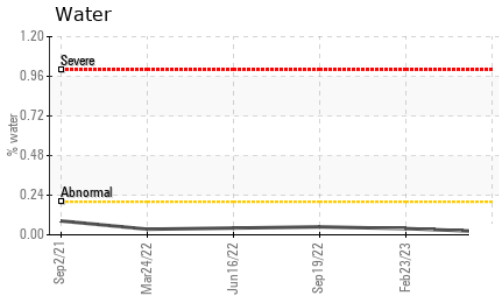
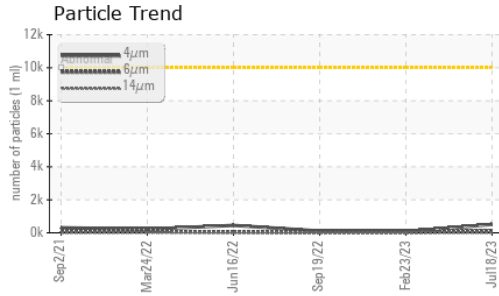
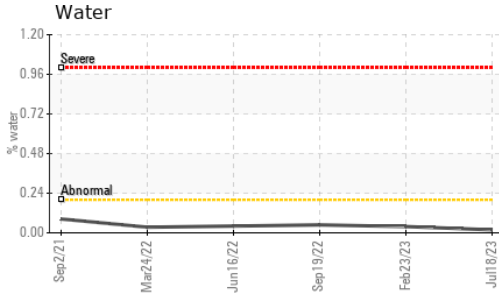
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>512</b>	74	111
Particles >6µm	ASTM D7647	>2500	<b>135</b>	27	25
Particles >14µm	ASTM D7647	>320	<b>11</b>	2	3
Particles >21µm	ASTM D7647	>80	<b>4</b>	1	2
Particles >38µm	ASTM D7647	>20	<b>0</b>	0	1
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>16/14/11</b>	13/12/9	14/12/9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.13</b>	0.119	0.04



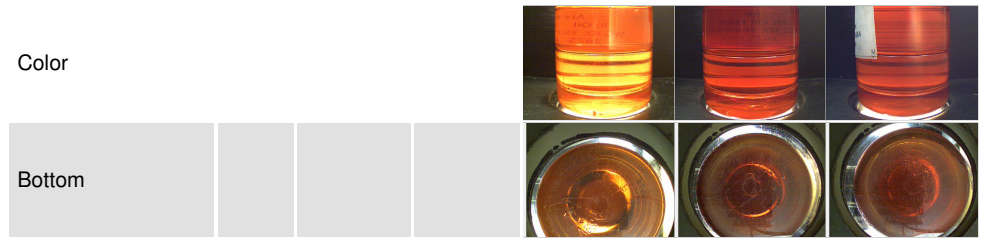
# OIL ANALYSIS REPORT



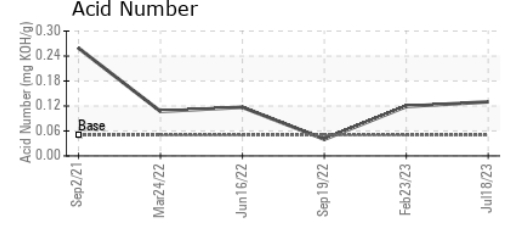
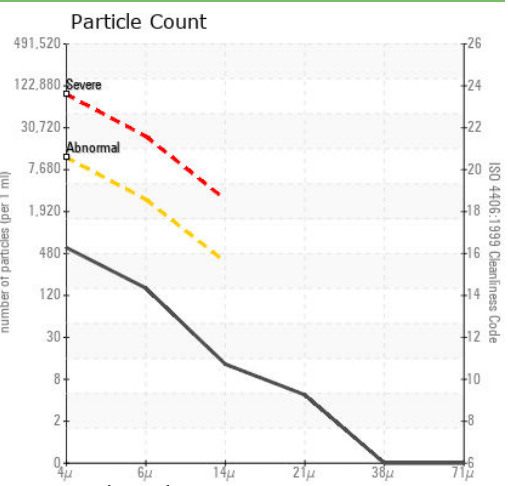
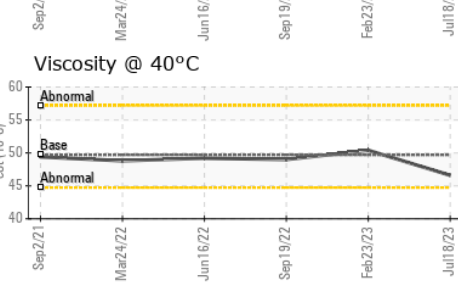
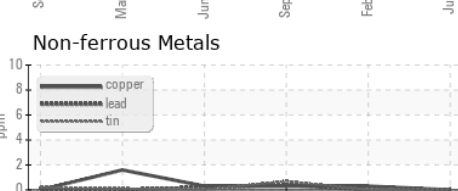
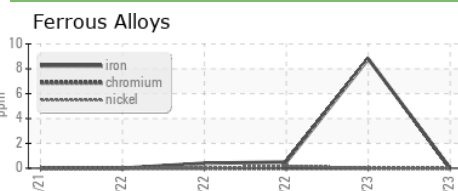
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	49.7	46.6	50.4	49.0

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM25356 **Received** : 20 Jul 2023  
**Lab Number** : 05903764 **Diagnosed** : 24 Jul 2023  
**Unique Number** : 10565120 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**TYSON-LEXINGTON-USP - MAIN PLANT**  
 PO BOX 920, PROSPECT ROAD US 283  
 LEXINGTON, NE  
 US 68850  
 Contact: SCOTT NIERMAN

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)

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