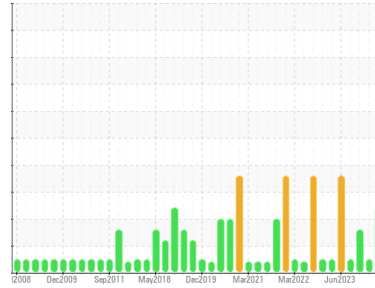# OIL ANALYSIS REPORT

Sample Rating Trend

Machine Id
N-1 (S/N EE1469U97064)
Component
Air Compressor
Fluid
USPI AIR 46 (--- GAL)

DIAGNOSIS

⚠️ **Recommendation**
We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

⚠️ **Contamination**
There is a high amount of particulates present in the oil.

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	**USPM36889**	USP0007576	USPM30618
Sample Date		Client Info	**19 Mar 2024**	22 Feb 2024	15 Jan 2024
Machine Age	hrs	Client Info	**0**	0	0
Oil Age	hrs	Client Info	**0**	0	0
Oil Changed		Client Info	**N/A**	N/A	N/A
Sample Status			**ABNORMAL**	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	0	3
Chromium	ppm	ASTM D5185m	>4	**0**	0	<1
Nickel	ppm	ASTM D5185m	>4	**0**	<1	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**0**	<1	3
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>40	**<1**	<1	1
Tin	ppm	ASTM D5185m	>5	**<1**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	0
Barium	ppm	ASTM D5185m	0	**<1**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	0
Magnesium	ppm	ASTM D5185m	0	**0**	1	<1
Calcium	ppm	ASTM D5185m	0	**<1**	1	2
Phosphorus	ppm	ASTM D5185m	1	**8**	0	12
Zinc	ppm	ASTM D5185m	0	**0**	0	0
Sulfur	ppm	ASTM D5185m	0	**8**	10	0

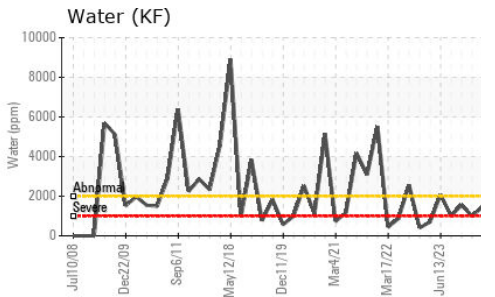| CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	<1	1
Sodium	ppm	ASTM D5185m		**0**	<1	7
Potassium	ppm	ASTM D5185m	>20	**0**	1	0
Water	%	ASTM D6304	>0.2	**0.146**	0.099	0.155
ppm Water	ppm	ASTM D6304	>2000	**1467**	992	1550

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		**80933**	129	213362
Particles >6µm	ASTM D7647	>2500	⚠️ **27809**	34	⚠️ 92241
Particles >14µm	ASTM D7647	>320	⚠️ **2813**	5	⚠️ 5724
Particles >21µm	ASTM D7647	>80	⚠️ **1041**	2	⚠️ 813
Particles >38µm	ASTM D7647	>20	⚠️ **108**	1	5
Particles >71µm	ASTM D7647	>4	⚠️ **12**	0	0
Oil Cleanliness	ISO 4406 (c)	>--/18/15	⚠️ **24/22/19**	14/12/10	⚠️ 25/24/20

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	**0.20**	0.19	0.26

Particle Trend

Water (KF)

Acid Number

Water (KF)

Viscosity @ 40°C
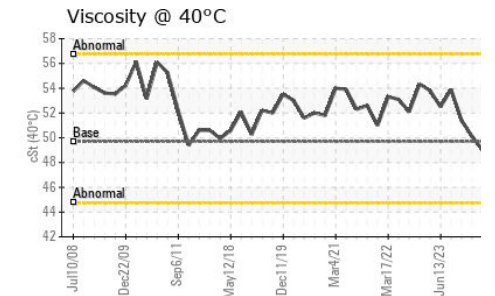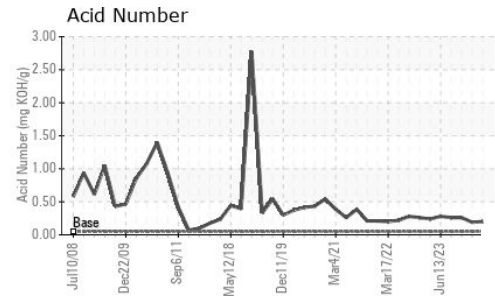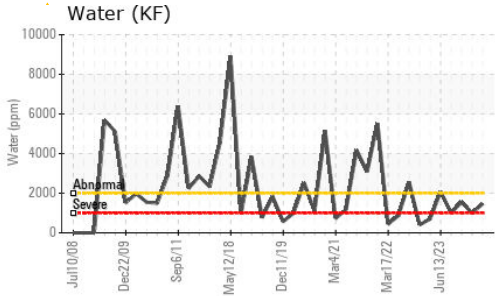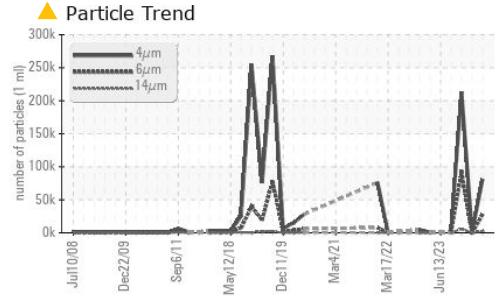
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	0.2%
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	49.7	**49.0**	50.1	51.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

Ferrous Alloys

Non-ferrous Metals

Viscosity @ 40°C

Particle Count

Acid Number
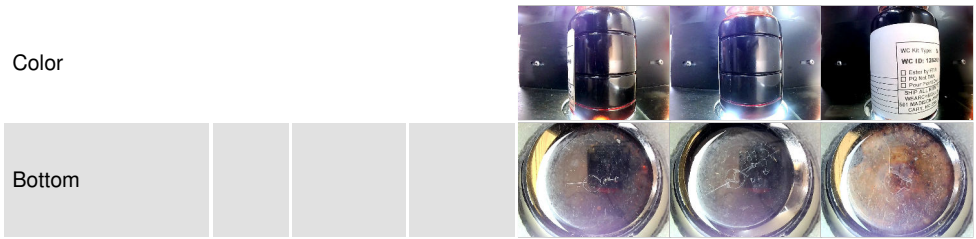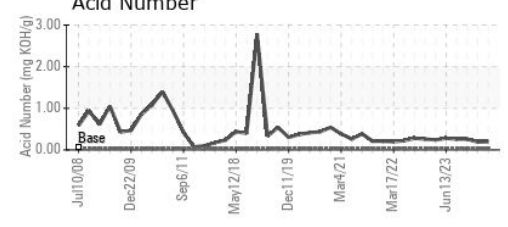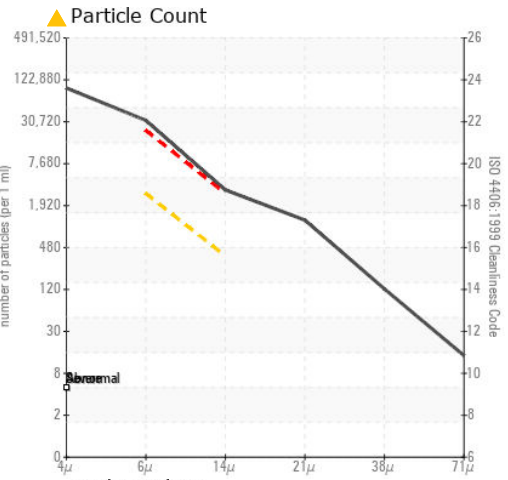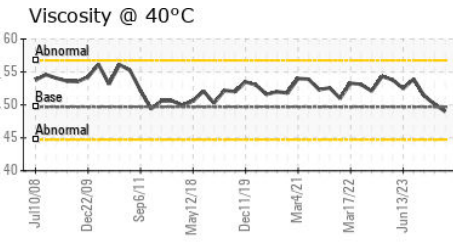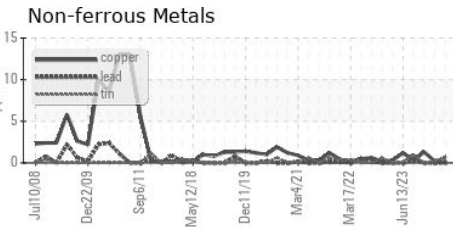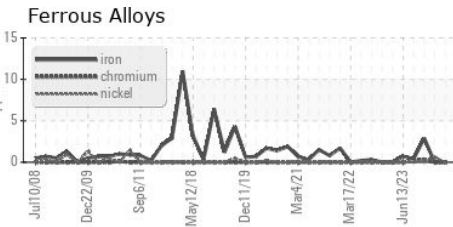
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : USPM36889 **Received** : 20 Mar 2024

Lab Number : 06123681 **Tested** : 25 Mar 2024

Unique Number : 10937832 **Diagnosed** : 25 Mar 2024 - Jonathan Hester

Test Package : IND 2

SMITHFIELD - DENISON - SMIDENIOW
800 INDUSTRIAL ROAD
DENISON, IA
US 51442
Contact: SERVICE MANAGER

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)

T: (712)263-7414
F: (712)263-7314

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367