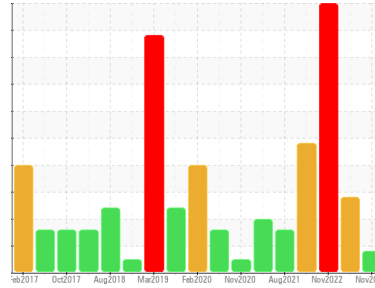




PROBLEM SUMMARY

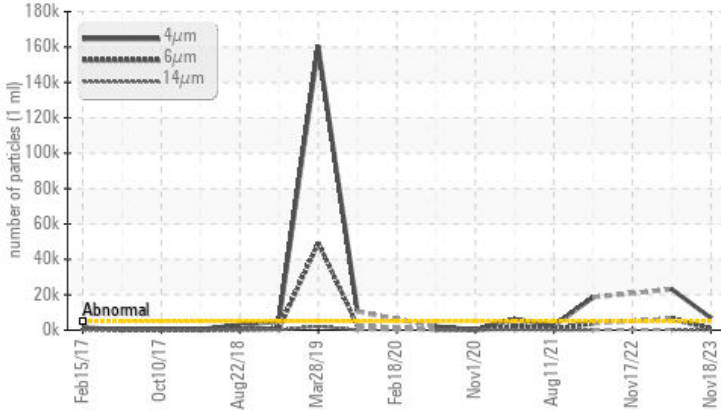
Sample Rating Trend



Machine Id
VAC 1178655-5 NORTH (S/N 5587386)
 Component
Pump
 Fluid
USPI VAC 100 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	ABNORMAL	SEVERE
Particles >4µm	ASTM D7647 >5000	▲ 6802	▲ 23138	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/17/13	▲ 22/20/15	---

Customer Id: JBSBEA
 Sample No.: USPM31298
 Lab Number: 06010907
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

16 Jul 2023 Diag: Doug Bogart

WEAR



We recommend you service the filters on this component. Resample at the next service interval to monitor. The iron level is abnormal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



17 Nov 2022 Diag: Doug Bogart

WEAR



Recommend drain oil if not already done and flush before refilling with oil. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count. The iron level is severe. Appearance is unacceptable. Excessive free water present. There is a high concentration of water present in the oil. The AN level is above the recommended limit. The oil is no longer serviceable.

view report



27 Feb 2022 Diag: Doug Bogart

WATER



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. The iron level is abnormal. There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil. An increase in the AN level is noted. Confirmed. The AN level is acceptable for this fluid.

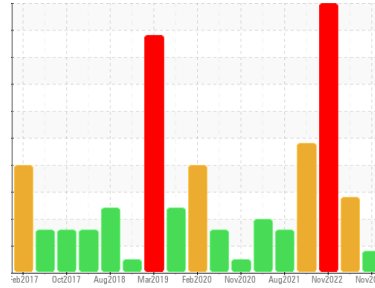
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
VAC 1178655-5 NORTH (S/N 5587386)

Component
Pump
Fluid
USPI VAC 100 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 6 microns in size) 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	USPM31298	USPM27384	USPM23649
Sample Date	Client Info	18 Nov 2023	16 Jul 2023	17 Nov 2022
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ATTENTION	ABNORMAL	SEVERE

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	2	▲ 154	● 402
Chromium	ppm	ASTM D5185m >5	0	0	<1
Nickel	ppm	ASTM D5185m >5	0	0	0
Titanium	ppm	ASTM D5185m >3	0	<1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >7	0	8	5
Lead	ppm	ASTM D5185m >12	0	<1	2
Copper	ppm	ASTM D5185m >30	0	<1	<1
Tin	ppm	ASTM D5185m >9	<1	<1	1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	<1

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	22	37
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	2
Magnesium	ppm	ASTM D5185m 0	0	2	1
Calcium	ppm	ASTM D5185m 0	1	14	31
Phosphorus	ppm	ASTM D5185m 1800	1333	910	1169
Zinc	ppm	ASTM D5185m 0	0	11	79
Sulfur	ppm	ASTM D5185m 0	81	6	19

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	<1	6	8
Sodium	ppm	ASTM D5185m	0	4	6
Potassium	ppm	ASTM D5185m >20	0	2	<1
Water	%	ASTM D6304 >.1	0.078	0.098	▲ 0.987
ppm Water	ppm	ASTM D6304 >1000	781.7	984.8	▲ 9870

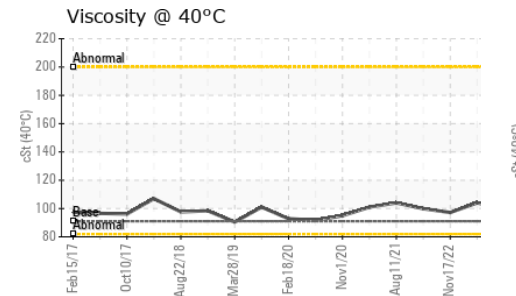
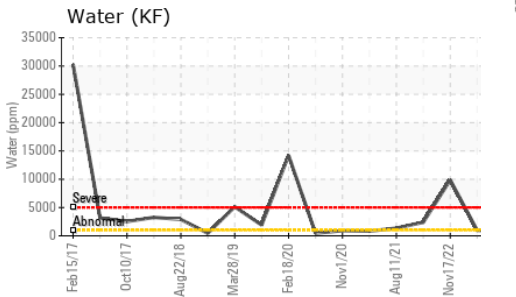
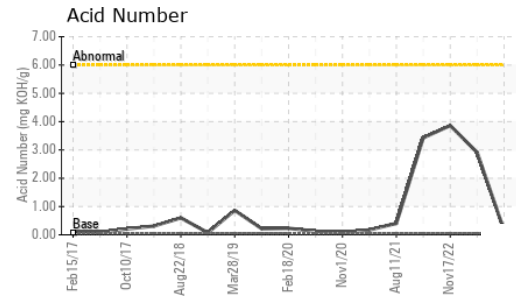
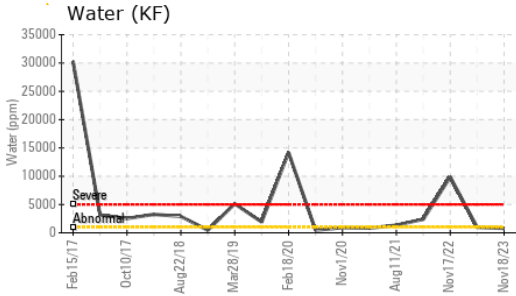
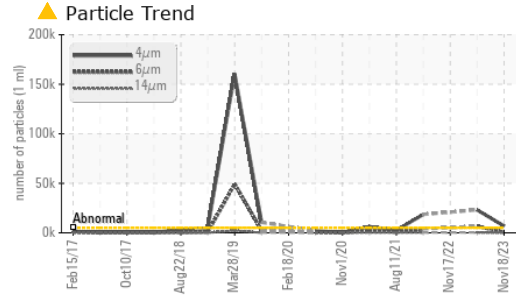
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 6802	▲ 23138	---
Particles >6µm	ASTM D7647 >1300	777	▲ 6478	---
Particles >14µm	ASTM D7647 >160	46	▲ 315	---
Particles >21µm	ASTM D7647 >40	12	▲ 57	---
Particles >38µm	ASTM D7647 >10	1	0	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/17/13	▲ 22/20/15	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	0.16	2.91	▲ 3.86

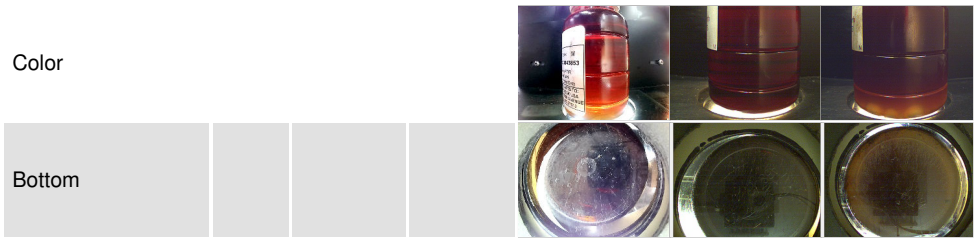
OIL ANALYSIS REPORT



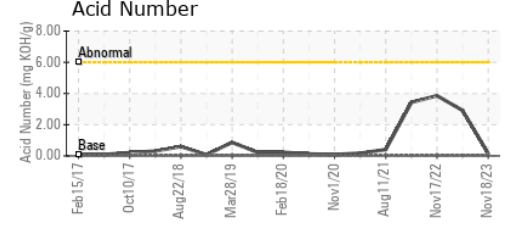
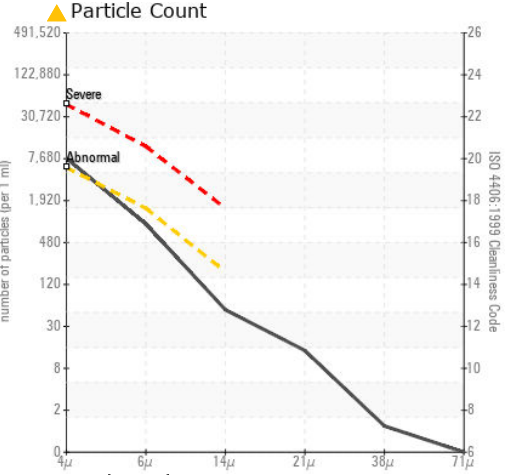
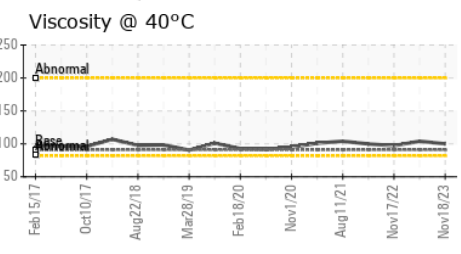
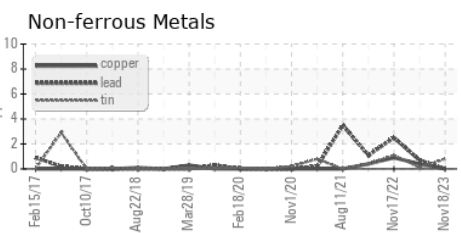
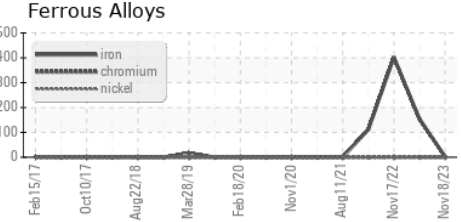
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	▲ MILKY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	◆ 5.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	100	104	97.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM31298 **Received** : 17 Nov 2023
Lab Number : 06010907 **Diagnosed** : 22 Nov 2023
Unique Number : 10750051 **Diagnostician** : Doug Bogart
Test Package : IND 2

JBS - BEARDSTOWN
 8295 ARENZVILLE RD
 BEARDSTOWN, IL
 US 62618
 Contact:

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)