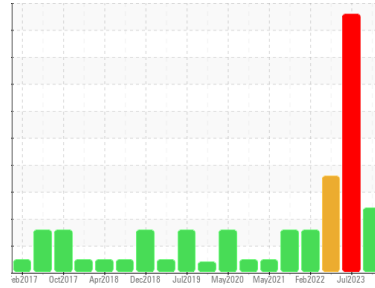




PROBLEM SUMMARY

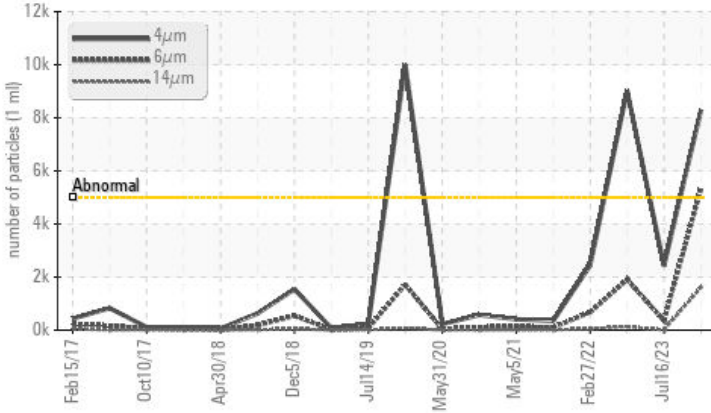
Sample Rating Trend



Machine Id
VAC 1178633-3 NORTH (S/N U061401703)
 Component
Pump
 Fluid
USPI VAC 100 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	SEVERE	ATTENTION
Particles >4µm	ASTM D7647	>5000	▲ 8294	2428	▲ 9017
Particles >6µm	ASTM D7647	>1300	▲ 5319	357	▲ 1906
Particles >14µm	ASTM D7647	>160	▲ 1602	9	124
Particles >21µm	ASTM D7647	>40	▲ 594	1	28
Particles >38µm	ASTM D7647	>10	▲ 27	0	5
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/20/18	18/16/10	▲ 20/18/14

Customer Id: JBSBEA
 Sample No.: USPM31312
 Lab Number: 06010897
 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

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

16 Jul 2023 Diag: Doug Bogart

WEAR



We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. The iron level is severe. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is above the recommended limit. Confirmed. The oil is no longer serviceable.

view report



17 Nov 2022 Diag: Doug Bogart

WATER



We recommend an early resample to monitor this condition. An increase in the iron level is noted. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid.

view report



27 Feb 2022 Diag: Doug Bogart

WATER



We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

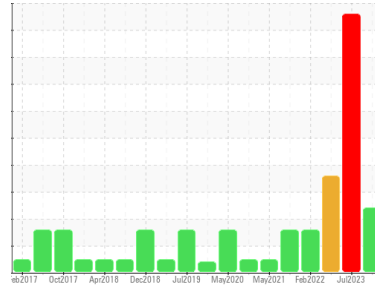
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
VAC 1178633-3 NORTH (S/N U061401703)

Component
Pump
Fluid
USPI VAC 100 (--- 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	USPM31312	USPM27378	USPM23643
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		ABNORMAL	SEVERE	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	<1	405	65
Chromium	ppm	ASTM D5185m >5	0	<1	0
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	13	1
Lead	ppm	ASTM D5185m >12	0	0	0
Copper	ppm	ASTM D5185m >30	0	<1	0
Tin	ppm	ASTM D5185m >9	<1	0	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	<1	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 0	<1	3	0
Calcium	ppm	ASTM D5185m 0	4	3	2
Phosphorus	ppm	ASTM D5185m 1800	726	1203	1569
Zinc	ppm	ASTM D5185m 0	0	0	4
Sulfur	ppm	ASTM D5185m 0	66	0	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	17	4	22
Sodium	ppm	ASTM D5185m	0	6	2
Potassium	ppm	ASTM D5185m >20	0	2	0
Water	%	ASTM D6304 >.1	0.034	0.130	0.106
ppm Water	ppm	ASTM D6304 >1000	348.6	1305.1	1064.3

FLUID CLEANLINESS

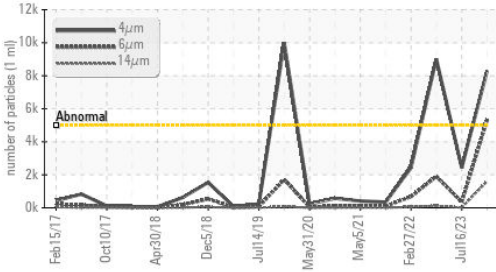
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	8294	2428	9017
Particles >6µm	ASTM D7647 >1300	5319	357	1906
Particles >14µm	ASTM D7647 >160	1602	9	124
Particles >21µm	ASTM D7647 >40	594	1	28
Particles >38µm	ASTM D7647 >10	27	0	5
Particles >71µm	ASTM D7647 >3	2	0	2
Oil Cleanliness	ISO 4406 (c) >19/17/14	20/20/18	18/16/10	20/18/14

FLUID DEGRADATION

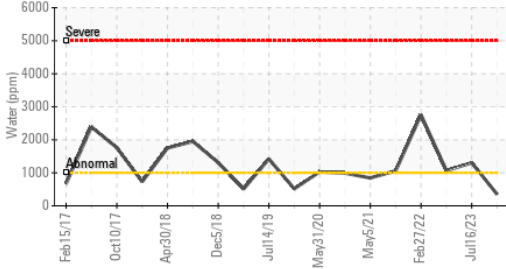
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	0.14	7.479	4.53

OIL ANALYSIS REPORT

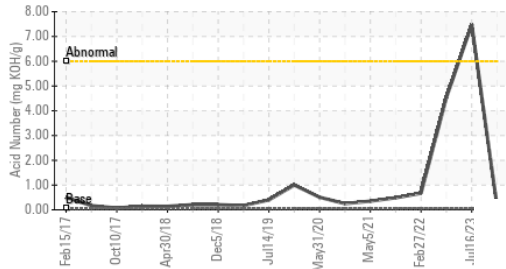
▲ Particle Trend



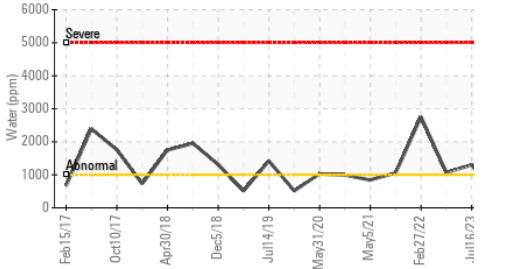
Water (KF)



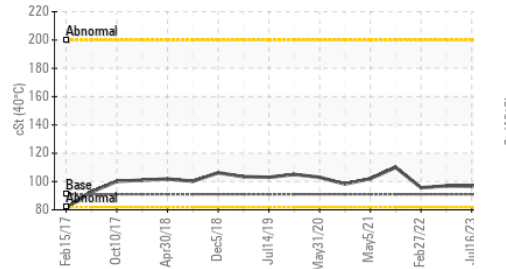
Acid Number



Water (KF)



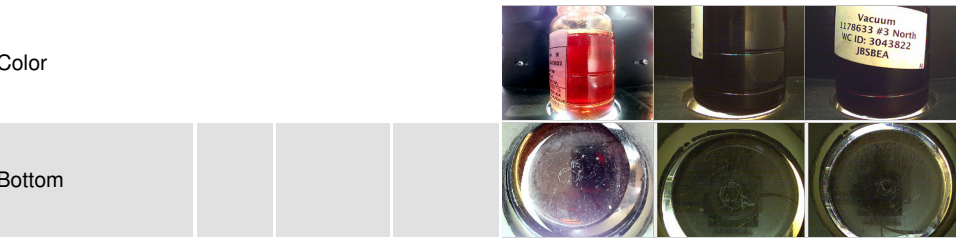
Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
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	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

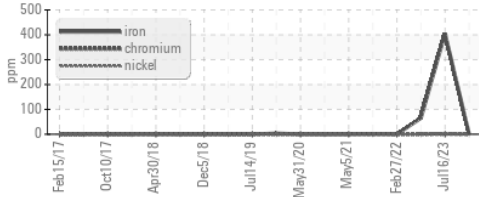
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	100	96.7	96.9

SAMPLE IMAGES

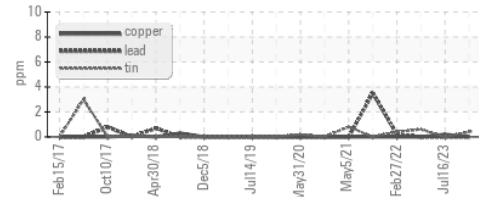


GRAPHS

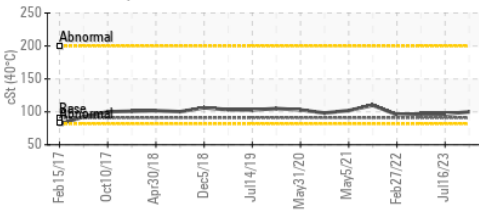
Ferrous Alloys



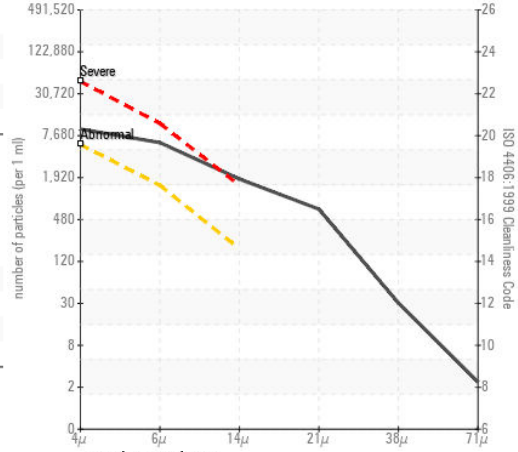
Non-ferrous Metals



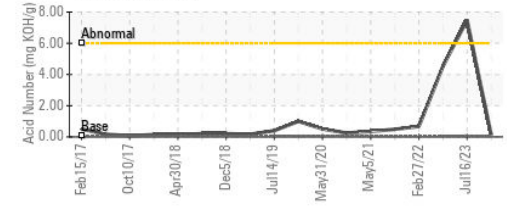
Viscosity @ 40°C



▲ Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM31312 **Received** : 17 Nov 2023
Lab Number : 06010897 **Diagnosed** : 20 Nov 2023
Unique Number : 10750041 **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)

T:
F: