



PROBLEM SUMMARY

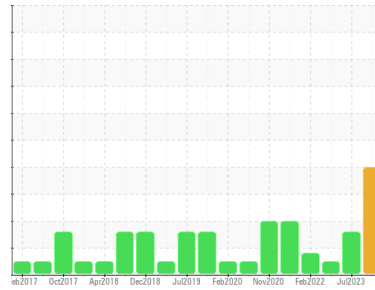
Sample Rating Trend

WATER



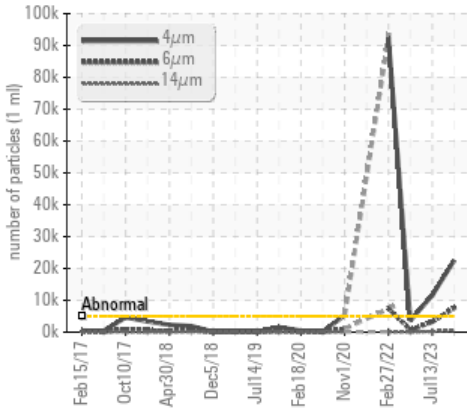
Machine Id
VAC 1178605-2 NORTH (S/N U061501855)

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

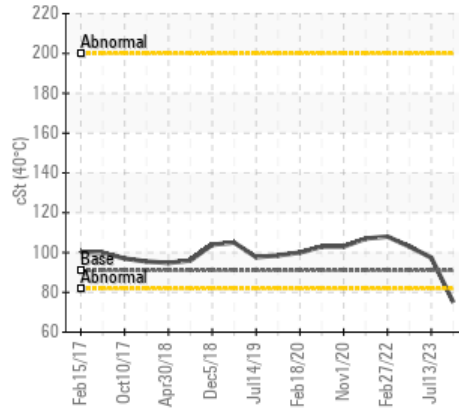


COMPONENT CONDITION SUMMARY

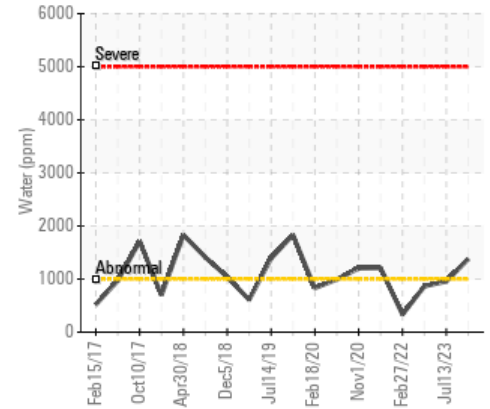
▲ Particle Trend



▲ Viscosity @ 40°C



▲ Water (KF)



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Water	%	ASTM D6304	>.1	▲ 0.137	0.095	0.086
ppm Water	ppm	ASTM D6304	>1000	▲ 1377.9	956.0	865.6
Particles >4µm		ASTM D7647	>5000	▲ 22551	▲ 11589	3653
Particles >6µm		ASTM D7647	>1300	▲ 7611	▲ 3218	737
Particles >14µm		ASTM D7647	>160	▲ 489	▲ 161	55
Particles >21µm		ASTM D7647	>40	▲ 94	28	19
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/16	▲ 21/19/15	19/17/13
Visc @ 40°C	cSt	ASTM D445	91	▲ 75.1	97.4	103

Customer Id: JBSBEA
Sample No.: USPM31317
Lab Number: 06010892
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

13 Jul 2023 Diag: Doug Bogart

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. 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

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination 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



27 Feb 2022 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

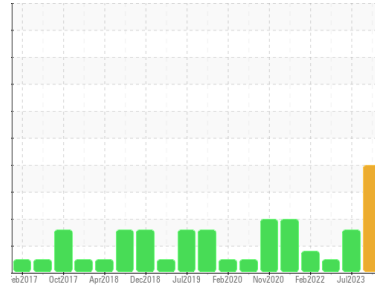
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
VAC 1178605-2 NORTH (S/N U061501855)

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 oil viscosity is lower than normal. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	USPM31317	USPM27375	USPM23640
Sample Date	Client Info	18 Nov 2023	13 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	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	0	1	0
Chromium	ppm	ASTM D5185m >5	0	0	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	<1	0
Lead	ppm	ASTM D5185m >12	0	0	<1
Copper	ppm	ASTM D5185m >30	0	0	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	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	<1	12
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 0	<1	0	0
Calcium	ppm	ASTM D5185m 0	0	0	0
Phosphorus	ppm	ASTM D5185m 1800	891	1330	1478
Zinc	ppm	ASTM D5185m 0	0	0	0
Sulfur	ppm	ASTM D5185m 0	52	28	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	4	4	3
Sodium	ppm	ASTM D5185m	0	<1	0
Potassium	ppm	ASTM D5185m >20	0	1	0
Water	%	ASTM D6304 >.1	▲ 0.137	0.095	0.086
ppm Water	ppm	ASTM D6304 >1000	▲ 1377.9	956.0	865.6

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 22551	▲ 11589	3653
Particles >6µm	ASTM D7647 >1300	▲ 7611	▲ 3218	737
Particles >14µm	ASTM D7647 >160	▲ 489	▲ 161	55
Particles >21µm	ASTM D7647 >40	▲ 94	28	19
Particles >38µm	ASTM D7647 >10	7	3	3
Particles >71µm	ASTM D7647 >3	1	1	1
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 22/20/16	▲ 21/19/15	19/17/13

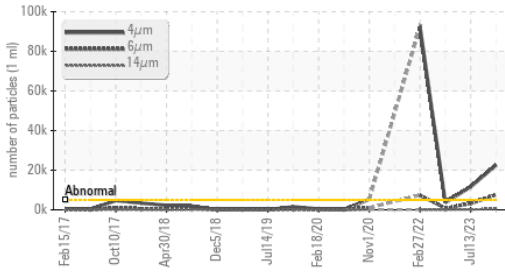
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	0.16	0.55	0.35

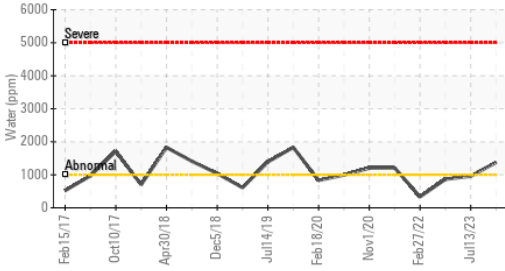


OIL ANALYSIS REPORT

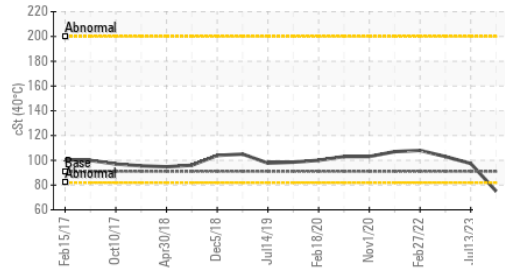
Particle Trend



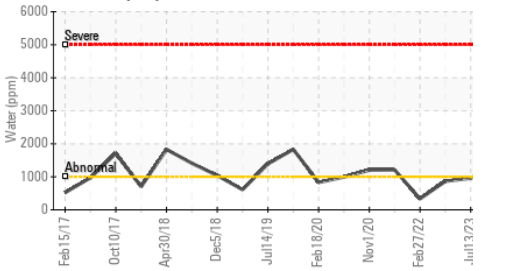
Water (KF)



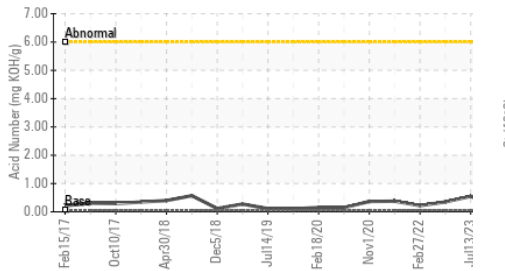
Viscosity @ 40°C



Water (KF)



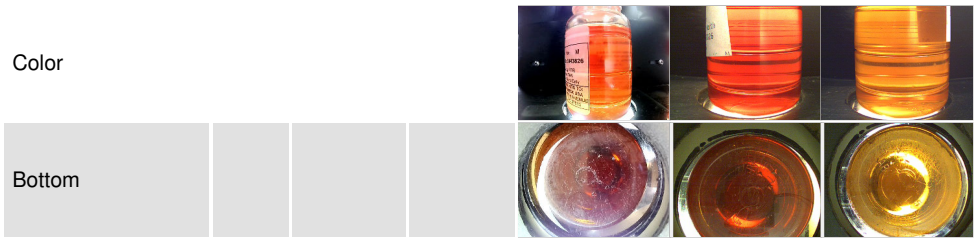
Acid Number



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	LIGHT	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

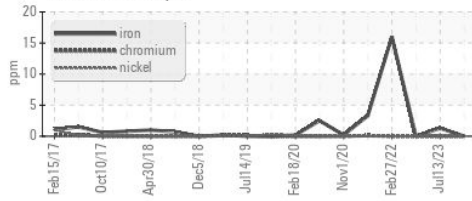
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	▲ 75.1	97.4	103

SAMPLE IMAGES	method	limit/base	current	history1	history2
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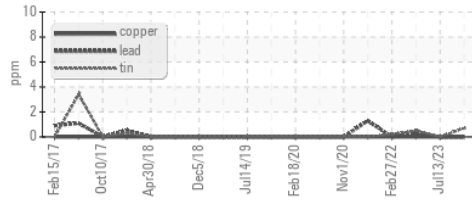


GRAPHS

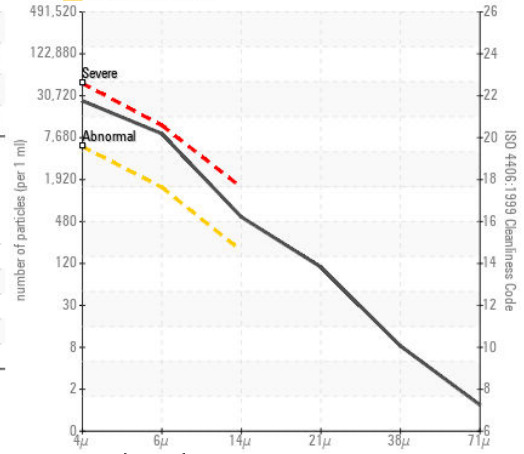
Ferrous Alloys



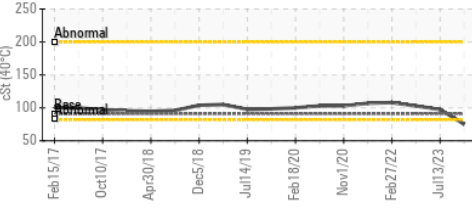
Non-ferrous Metals



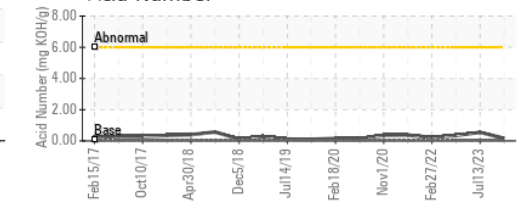
Particle Count



Viscosity @ 40°C



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM31317 **Received** : 17 Nov 2023
Lab Number : 06010892 **Diagnosed** : 22 Nov 2023
Unique Number : 10750036 **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: