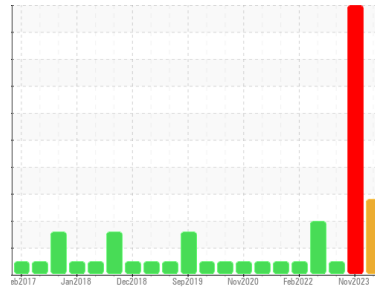




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
VAC 1178634-3 MIDDLE (S/N C5878-1)
 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. Moderate concentration of visible dirt/debris 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	USPM36818	USPM31309	USPM27379
Sample Date	Client Info	23 Apr 2024	18 Nov 2023	13 Jul 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	SEVERE	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	2	39	2
Chromium	ppm	ASTM D5185m >5	0	<1	0
Nickel	ppm	ASTM D5185m >5	0	<1	0
Titanium	ppm	ASTM D5185m >3	0	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >7	0	▲ 124	<1
Lead	ppm	ASTM D5185m >12	0	2	0
Copper	ppm	ASTM D5185m >30	0	2	0
Tin	ppm	ASTM D5185m >9	0	<1	0
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 0	0	35	0
Molybdenum	ppm	ASTM D5185m 0	0	<1	0
Manganese	ppm	ASTM D5185m	0	1	<1
Magnesium	ppm	ASTM D5185m 0	<1	3	0
Calcium	ppm	ASTM D5185m 0	4	14	0
Phosphorus	ppm	ASTM D5185m 1800	680	939	1436
Zinc	ppm	ASTM D5185m 0	0	3	0
Sulfur	ppm	ASTM D5185m 0	74	5	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	15	6	3
Sodium	ppm	ASTM D5185m	<1	▲ 850	0
Potassium	ppm	ASTM D5185m >20	0	5	2
Water	%	ASTM D6304 >.1	0.039	▲ 0.245	0.060
ppm Water	ppm	ASTM D6304 >1000	395	▲ 2450.0	600.5

FLUID CLEANLINESS

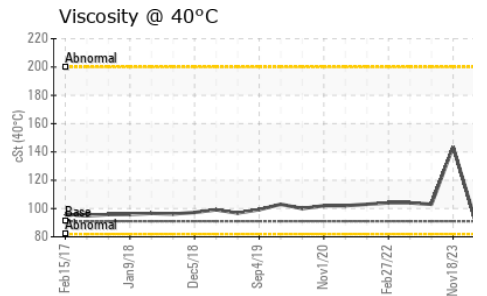
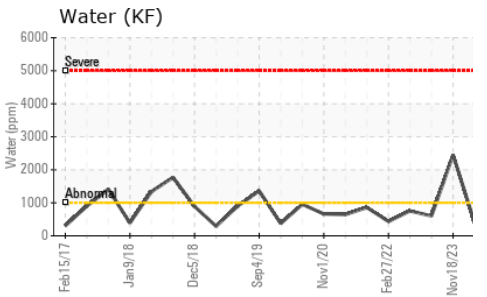
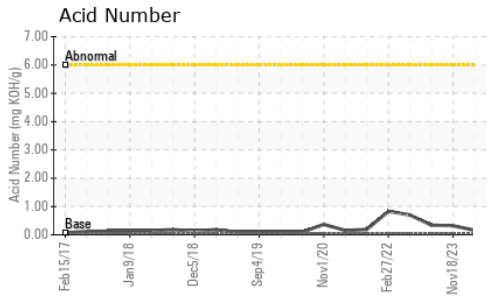
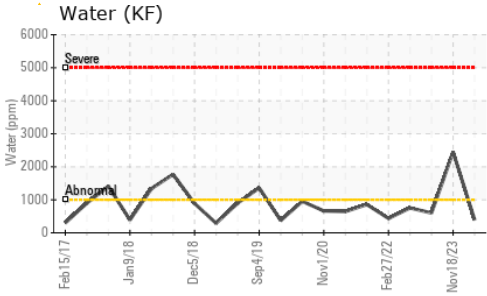
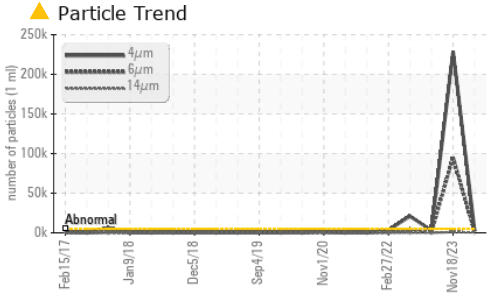
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	2940	▲ 229065	2802
Particles >6µm	ASTM D7647 >1300	▲ 1381	▲ 95171	868
Particles >14µm	ASTM D7647 >160	▲ 524	▲ 899	43
Particles >21µm	ASTM D7647 >40	▲ 298	▲ 241	7
Particles >38µm	ASTM D7647 >10	▲ 45	▲ 23	1
Particles >71µm	ASTM D7647 >3	▲ 4	▲ 5	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 19/18/16	▲ 25/24/17	19/17/13

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	0.16	0.32	0.34



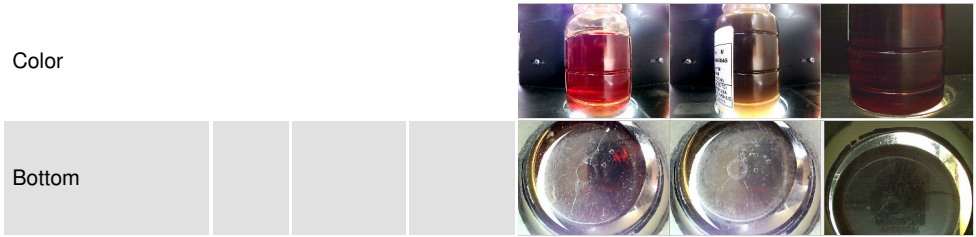
OIL ANALYSIS REPORT



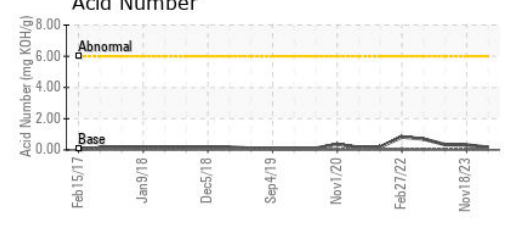
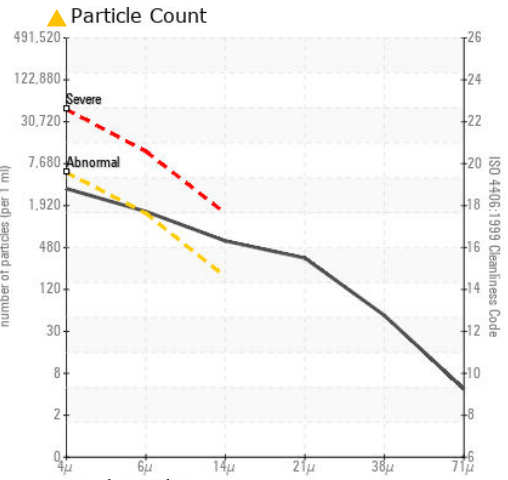
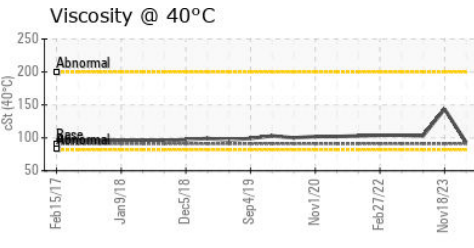
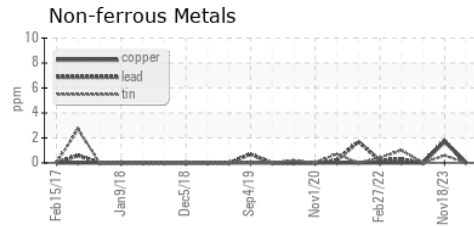
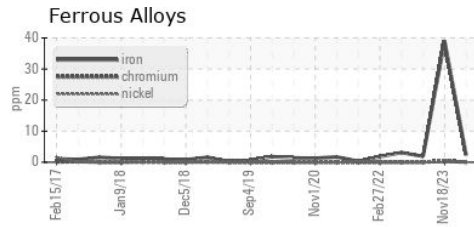
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	93.1	143.6	103

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM36818 **Received** : 24 Apr 2024
Lab Number : 06159128 **Tested** : 25 Apr 2024
Unique Number : 10994551 **Diagnosed** : 26 Apr 2024 - Jonathan Hester
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)