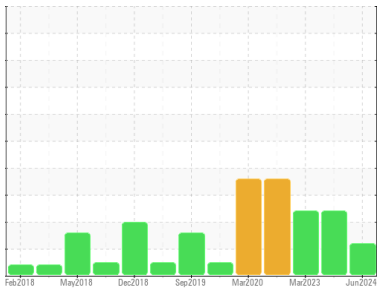
OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES

Machine Id
PL1 LINE 2 MULTIVAC (S/N 5593484)
Component
Pump
Fluid
USPI VAC 100 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear
All component wear rates are normal.

Contamination
Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USPM36473**	USPM30745	USPM26886
Sample Date		Client Info		**04 Jun 2024**	23 Jan 2024	22 Mar 2023
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**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	**12**	0	6
Chromium	ppm	ASTM D5185m	>5	**0**	0	<1
Nickel	ppm	ASTM D5185m	>5	**0**	0	<1
Titanium	ppm	ASTM D5185m	>3	**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>7	**0**	<1	1
Lead	ppm	ASTM D5185m	>12	**0**	0	<1
Copper	ppm	ASTM D5185m	>30	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>9	**0**	<1	0
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

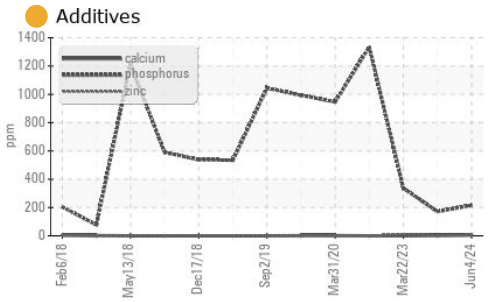
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	0
Barium	ppm	ASTM D5185m	0	**1**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m	0	**1**	<1	<1
Calcium	ppm	ASTM D5185m	0	**4**	2	<1
Phosphorus	ppm	ASTM D5185m	1800	**216**	171	337
Zinc	ppm	ASTM D5185m	0	**5**	<1	12
Sulfur	ppm	ASTM D5185m	0	**200**	1327	297

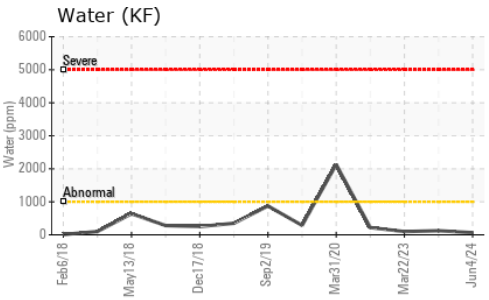
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	**58**	5	11
Sodium	ppm	ASTM D5185m		**4**	20	<1
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	0
Water	%	ASTM D6304	>.1	**0.006**	0.012	0.009
ppm Water	ppm	ASTM D6304	>1000	**65**	125	98.5

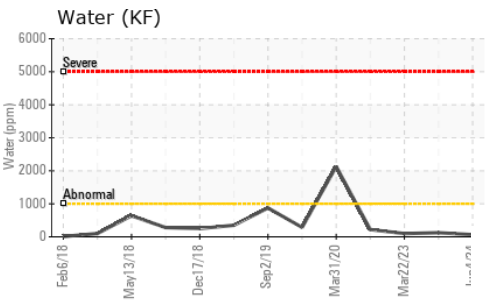
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**---**	19527	285405
Particles >6µm		ASTM D7647	>1300	**---**	1792	39151
Particles >14µm		ASTM D7647	>160	**---**	55	165
Particles >21µm		ASTM D7647	>40	**---**	16	33
Particles >38µm		ASTM D7647	>10	**---**	1	1
Particles >71µm		ASTM D7647	>3	**---**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**---**	21/18/13	25/22/15

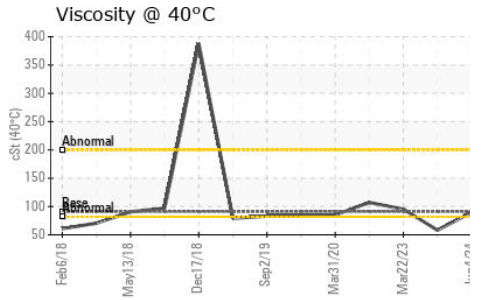
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	**0.078**	0.211	0.147

OIL ANALYSIS REPORT



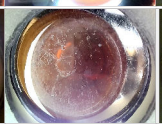
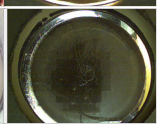




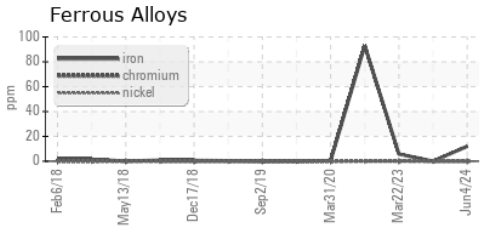


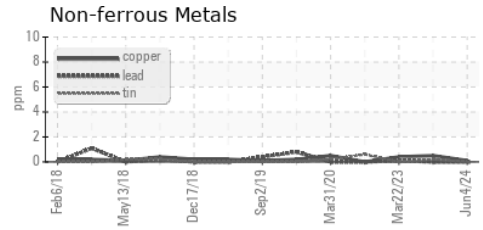
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	LIGHT
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	>.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

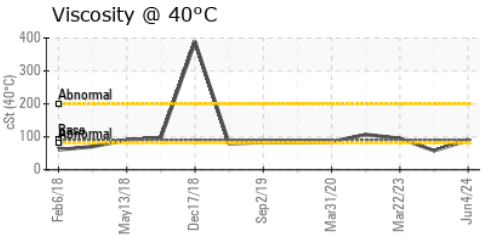
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91	**89.9**	58.1	95.3

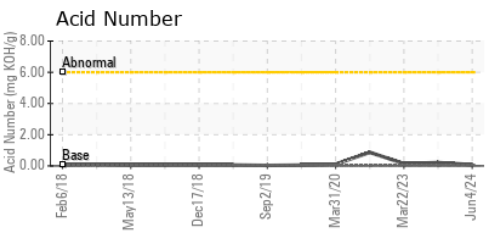
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM36473
Lab Number : 06200183
Unique Number : 11062306
Test Package : IND 2

Received : 05 Jun 2024
Tested : 10 Jun 2024
Diagnosed : 10 Jun 2024 - Angela Borella

ARMOUR - ECKRICH (SMITHFIELD FOODS SMISAIILL)
SAINT CHARLES, IL
US
Contact:
T:
F:

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)