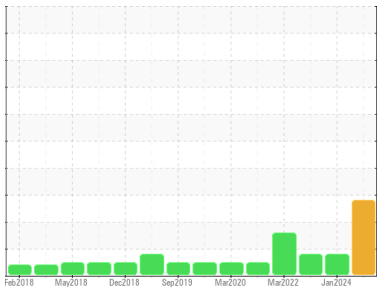
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
PL2 WEST CV LOWER (S/N 5585259)
Component
Pump
Fluid
USPI VAC 100 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water 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		**USPM36474**	USPM30744	USPM26888
Sample Date		Client Info		**04 Jun 2024**	13 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**	ATTENTION	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	**0**	0	<1
Chromium	ppm	ASTM D5185m	>5	**0**	0	0
Nickel	ppm	ASTM D5185m	>5	**0**	0	0
Titanium	ppm	ASTM D5185m	>3	**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>7	**0**	0	<1
Lead	ppm	ASTM D5185m	>12	**0**	0	0
Copper	ppm	ASTM D5185m	>30	**0**	0	<1
Tin	ppm	ASTM D5185m	>9	**0**	<1	0
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
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	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	0
Magnesium	ppm	ASTM D5185m	0	**<1**	<1	<1
Calcium	ppm	ASTM D5185m	0	**0**	2	<1
Phosphorus	ppm	ASTM D5185m	1800	**893**	986	1282
Zinc	ppm	ASTM D5185m	0	**1**	0	5
Sulfur	ppm	ASTM D5185m	0	**5**	27	25

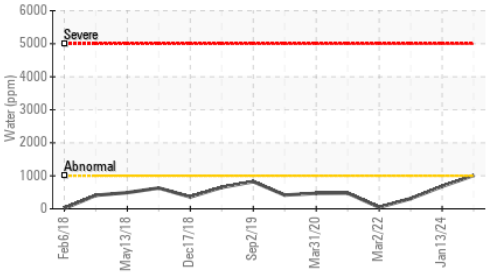
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	**<1**	4	2
Sodium	ppm	ASTM D5185m		**0**	1	0
Potassium	ppm	ASTM D5185m	>20	**0**	0	<1
Water	%	ASTM D6304	>.1	▲ **0.101**	0.067	0.031
ppm Water	ppm	ASTM D6304	>1000	▲ **1012**	679	310.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	● **5896**	● 9722	● 6749
Particles >6µm		ASTM D7647	>1300	● **2133**	1123	1299
Particles >14µm		ASTM D7647	>160	**85**	34	80
Particles >21µm		ASTM D7647	>40	**14**	10	25
Particles >38µm		ASTM D7647	>10	**2**	3	1
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	● **20/18/14**	● 20/17/12	● 20/17/13

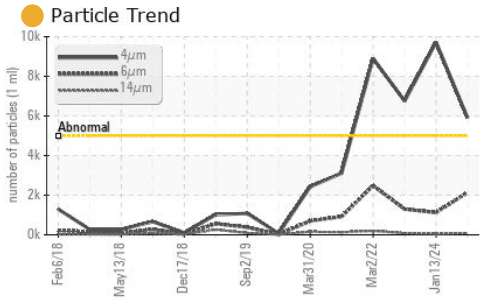
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	**0.11**	0.228	0.119

OIL ANALYSIS REPORT

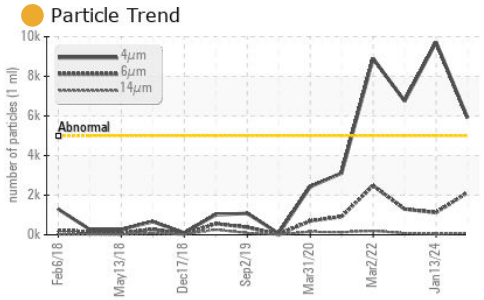
Water (KF)



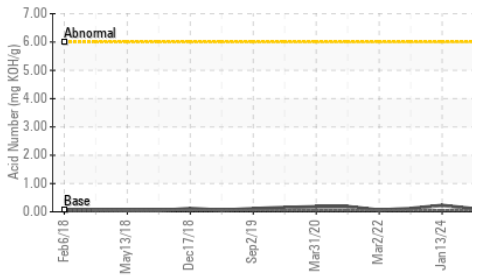
Particle Trend



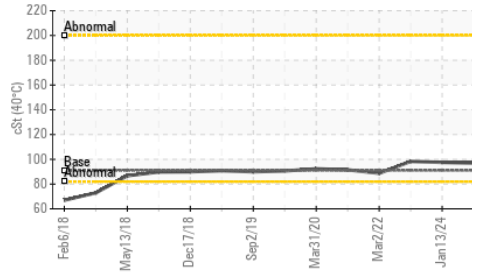
Particle Trend



Acid Number

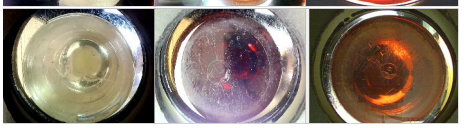


Viscosity @ 40°C



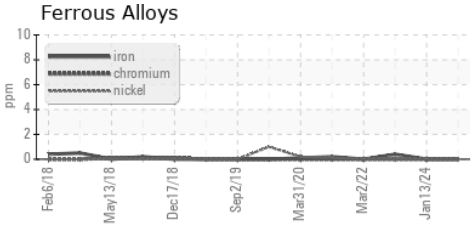
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Sand/Dirt	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	**96.9**	97.48	98.3

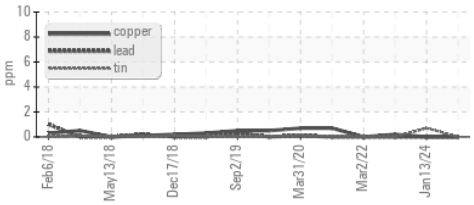
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

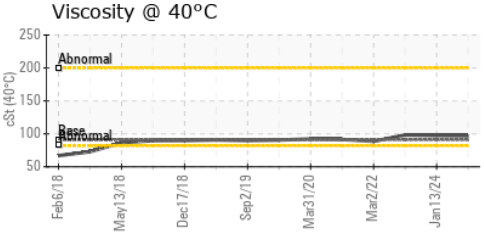
Ferrous Alloys



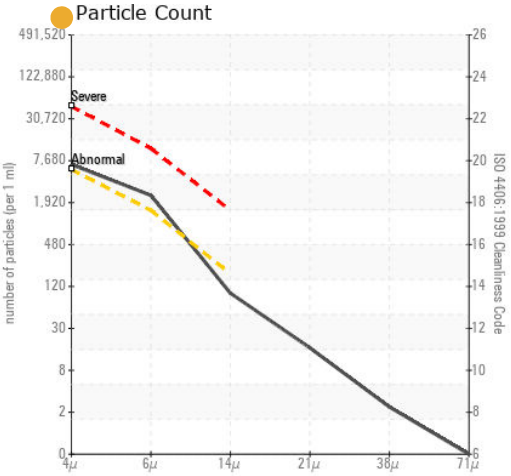
Non-ferrous Metals



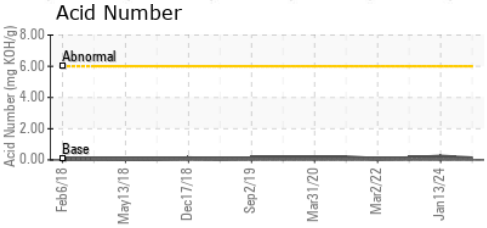
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM36474
Lab Number : 06200182
Unique Number : 11062305
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:

Certificate L2367

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)