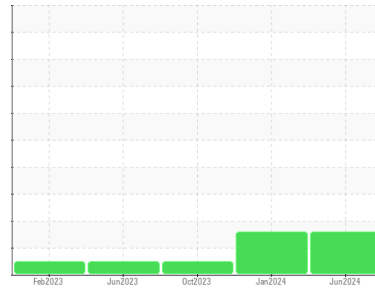




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
BUSCH LINE 11 (S/N 5586707)

Component
Vacuum Pump
Fluid
USPI VAC 100 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal. The amount and size of particulates present in the system are acceptable.

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	USPM36333	USPM30739	USPM29961
Sample Date	Client Info	02 Jun 2024	23 Jan 2024	09 Oct 2023
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		MARGINAL	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>20	0	9	0
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	4	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	0	<1	0
Tin	ppm	ASTM D5185m	>20	0	0	<1
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	1	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	0	0	0	0
Calcium	ppm	ASTM D5185m	0	0	<1	<1
Phosphorus	ppm	ASTM D5185m	1800	921	956	793
Zinc	ppm	ASTM D5185m	0	0	5	<1
Sulfur	ppm	ASTM D5185m	0	8	0	56

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>15	▲ 23	▲ 34	2
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water	%	ASTM D6304	>.1	0.040	0.021	0.020
ppm Water	ppm	ASTM D6304	>1000	410	212	207.9

FLUID CLEANLINESS

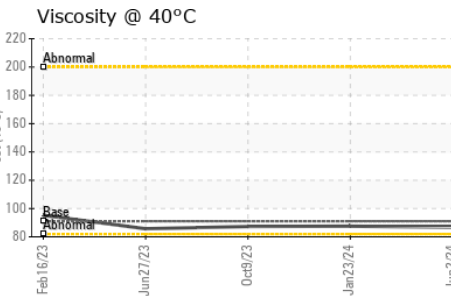
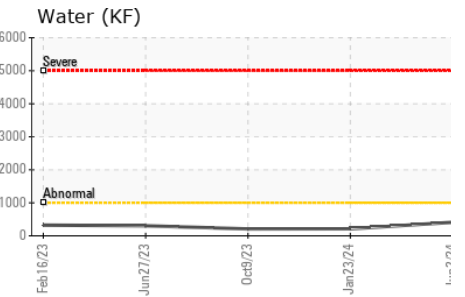
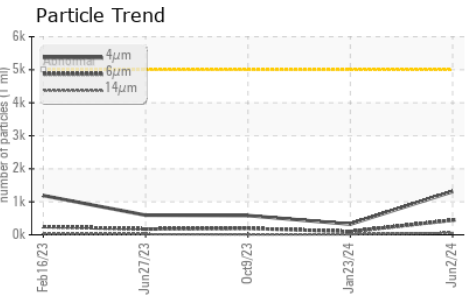
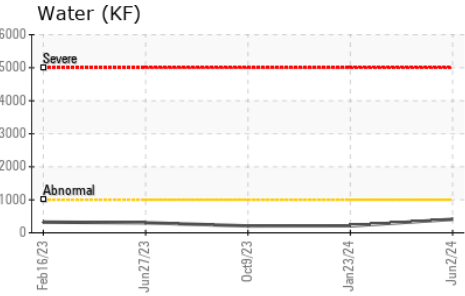
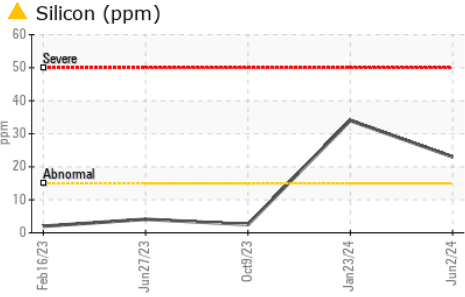
method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	1311	323	583
Particles >6µm	ASTM D7647	>1300	445	98	194
Particles >14µm	ASTM D7647	>160	58	14	12
Particles >21µm	ASTM D7647	>40	11	4	5
Particles >38µm	ASTM D7647	>10	1	1	2
Particles >71µm	ASTM D7647	>3	0	1	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	18/16/13	16/14/11	16/15/11

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.21	0.17	0.093



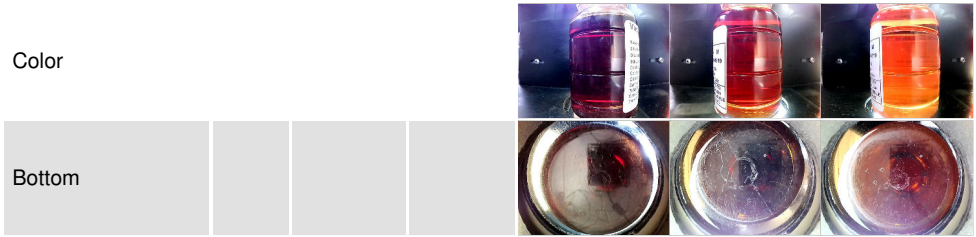
OIL ANALYSIS REPORT



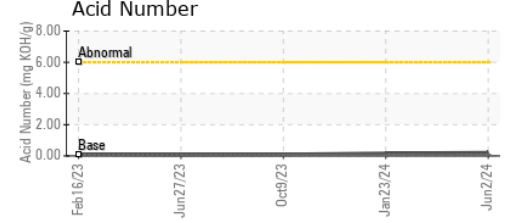
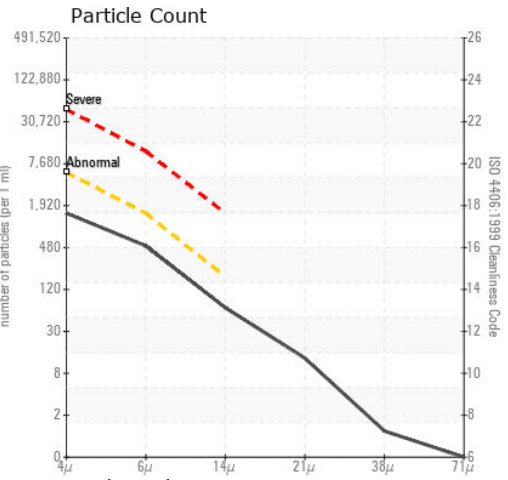
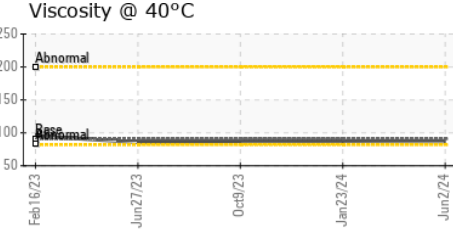
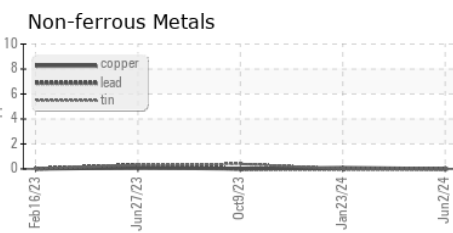
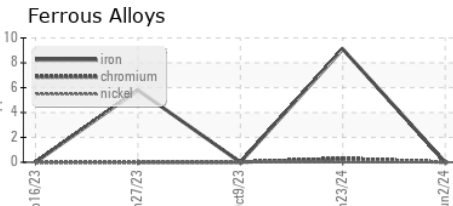
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	86.8	87.5	87.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM36333
Lab Number : 06197677
Unique Number : 11059800
Test Package : IND 2

ARMOUR-ECKRICH MEATS LLC - SMITHFIELD
 JUNCTION CITY, KS
 US 66441
 Contact: SERVICE MANAGER

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)

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