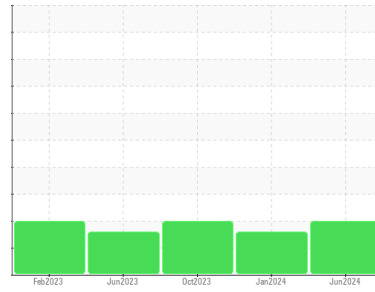




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
BUSCH LINE 1 (S/N C3831 & 5587816)
 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 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		USPM36339	USPM30731	USPM29953
Sample Date	Client Info		02 Jun 2024	23 Jan 2024	09 Oct 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 >20	3	17	5
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	<1
Barium	ppm	ASTM D5185m 0	0	1	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 0	0	<1	0
Calcium	ppm	ASTM D5185m 0	0	<1	<1
Phosphorus	ppm	ASTM D5185m 1800	472	910	504
Zinc	ppm	ASTM D5185m 0	0	5	2
Sulfur	ppm	ASTM D5185m 0	43	0	49

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	▲ 27	▲ 50	▲ 46
Sodium	ppm	ASTM D5185m	<1	0	<1
Potassium	ppm	ASTM D5185m >20	0	1	0
Water	%	ASTM D6304 >.1	0.017	0.023	0.013
ppm Water	ppm	ASTM D6304 >1000	178	234	134.8

FLUID CLEANLINESS

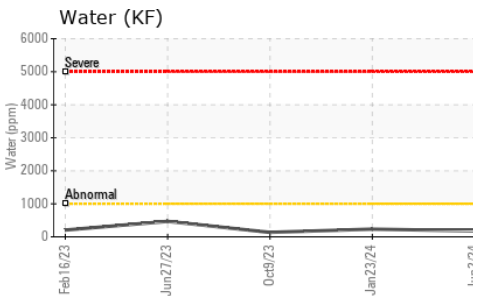
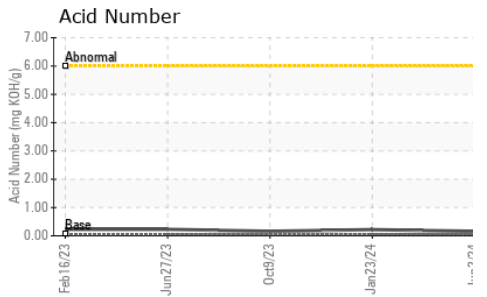
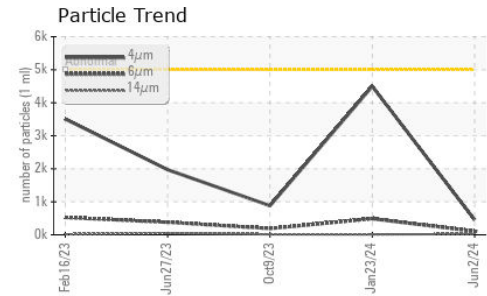
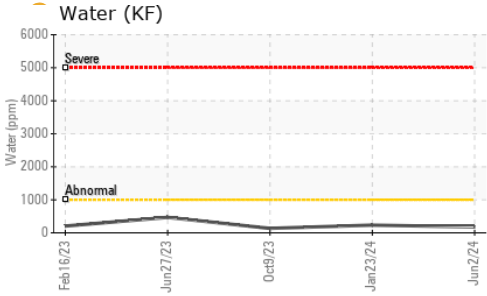
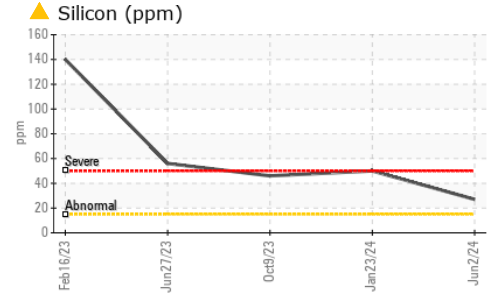
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	454	4497	881
Particles >6µm	ASTM D7647	>1300	109	490	191
Particles >14µm	ASTM D7647	>160	22	11	14
Particles >21µm	ASTM D7647	>40	5	3	5
Particles >38µm	ASTM D7647	>10	0	0	2
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	16/14/12	19/16/11	17/15/11

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	0.16	0.22	0.16



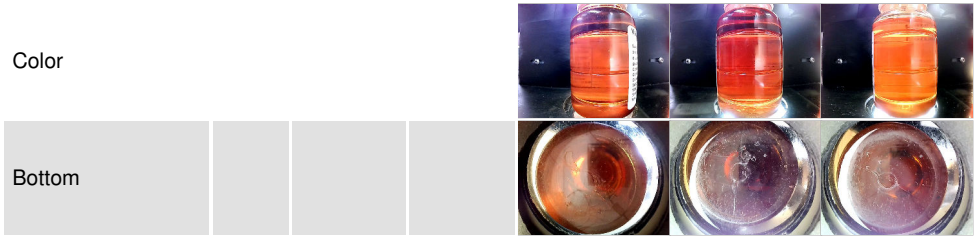
OIL ANALYSIS REPORT



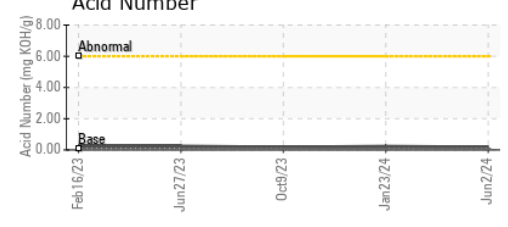
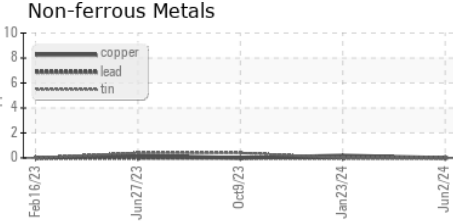
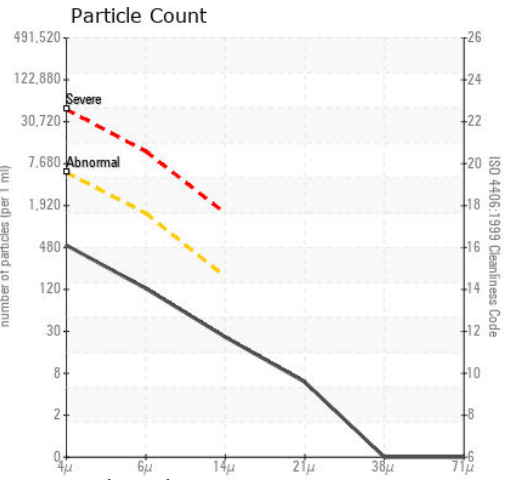
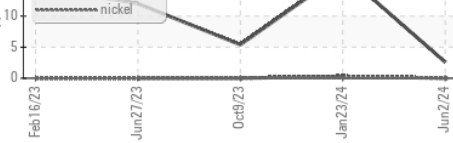
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	67.5	81.6	62.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM36339
Lab Number : 06197671
Unique Number : 11059794
Test Package : IND 2
Received : 03 Jun 2024
Tested : 04 Jun 2024
Diagnosed : 05 Jun 2024 - Doug Bogart

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)