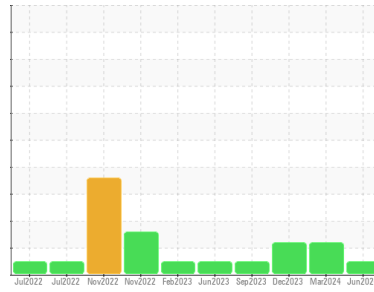




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
BUSCH VP-1A (S/N USM121200031)
 Component
Vacuum Pump
 Fluid
USPI VAC 100 (--- GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil. 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		USP0012435	USPM36550	USPM31638
Sample Date	Client Info		07 Jun 2024	31 Mar 2024	26 Dec 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			NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	2	1	0
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	0	<1	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	<1	<1	0
Lead	ppm	ASTM D5185m >20	<1	0	0
Copper	ppm	ASTM D5185m >20	<1	0	0
Tin	ppm	ASTM D5185m >20	<1	<1	0
Vanadium	ppm	ASTM D5185m	<1	<1	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	<1	0	0
Magnesium	ppm	ASTM D5185m 0	0	0	0
Calcium	ppm	ASTM D5185m 0	0	0	0
Phosphorus	ppm	ASTM D5185m 1800	733	766	667
Zinc	ppm	ASTM D5185m 0	0	0	0
Sulfur	ppm	ASTM D5185m 0	0	0	13

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	3	2	2
Sodium	ppm	ASTM D5185m	1	<1	0
Potassium	ppm	ASTM D5185m >20	<1	2	0
Water	%	ASTM D6304 >.1	0.037	0.047	0.042
ppm Water	ppm	ASTM D6304 >1000	379	470	423

FLUID CLEANLINESS

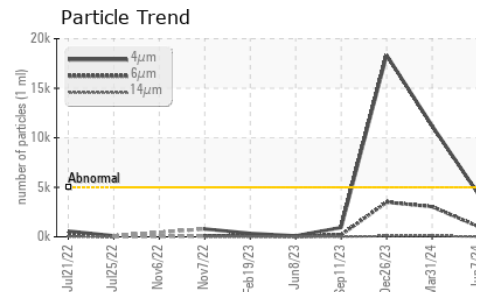
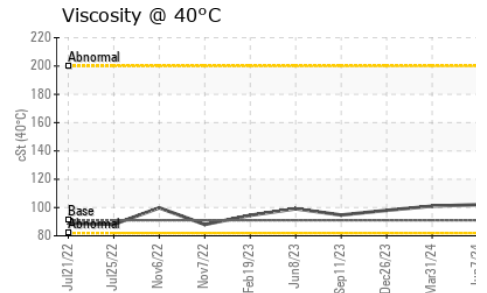
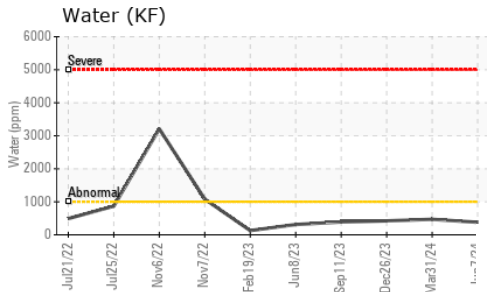
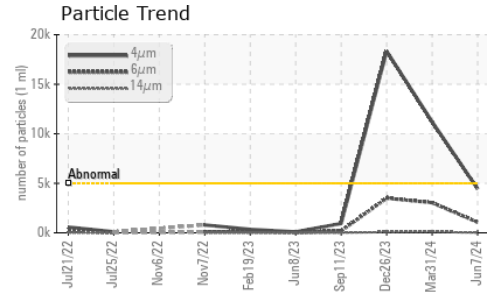
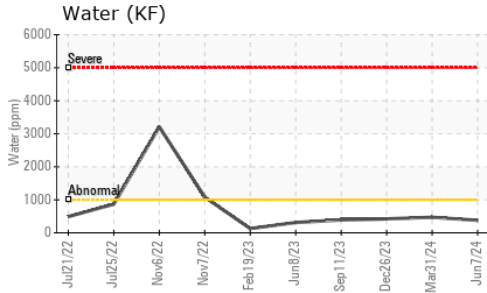
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	4437	▲ 11216	▲ 18336
Particles >6µm	ASTM D7647	>1300	1068	▲ 3044	▲ 3495
Particles >14µm	ASTM D7647	>160	15	97	72
Particles >21µm	ASTM D7647	>40	1	20	11
Particles >38µm	ASTM D7647	>10	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/17/11	▲ 21/19/14	▲ 21/19/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	0.39	0.36	0.30



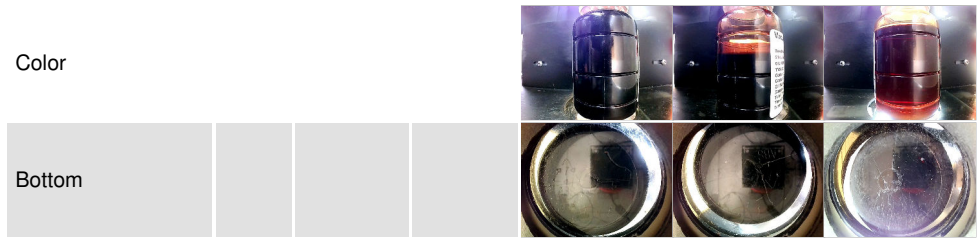
OIL ANALYSIS REPORT



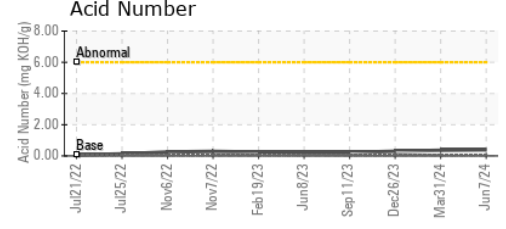
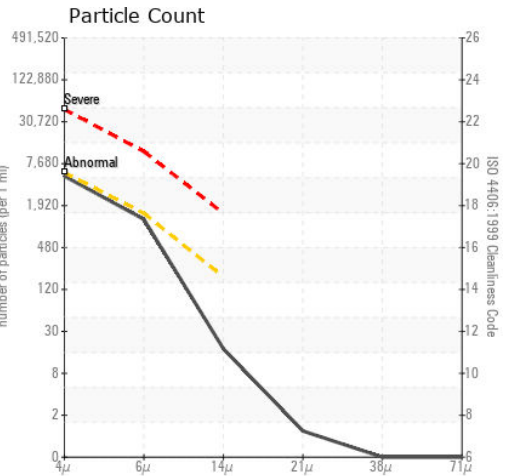
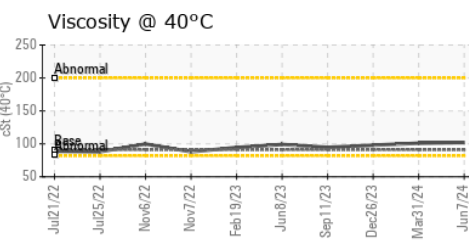
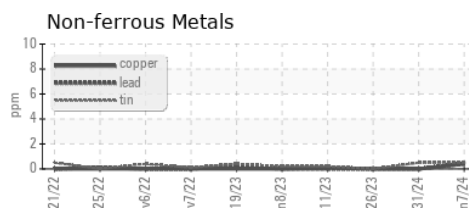
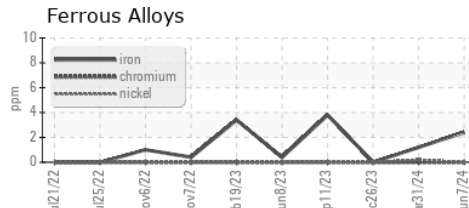
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	102	101	98.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012435
Lab Number : 06204711
Unique Number : 11072172
Test Package : IND 2

TYSON-LEXINGTON-USP - MAIN PLANT
 PO BOX 920, PROSPECT ROAD US 283
 LEXINGTON, NE
 US 68850
 Contact: SCOTT NIERMAN

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)

T: (308)324-8221

F: (308)324-8233