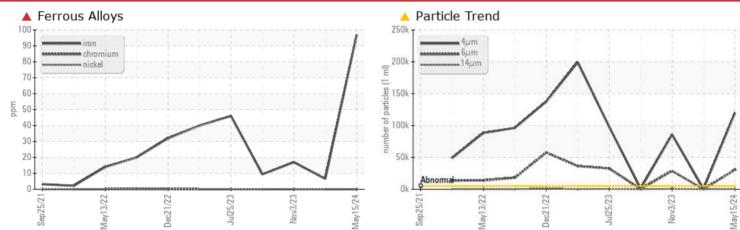


PROBLEM SUMMARY

Machine Id MV15 PUMP 151 (S/N 200001524)

Vacuum Pump Fluid USPI VAC 100 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS								
Sample Status				SEVERE	NORMAL	ABNORMAL		
Iron	ppm	ASTM D5185m	>20	4 97	7	17		
Particles >4µm		ASTM D7647	>5000	🔺 119895	593	▲ 85897		
Particles >6µm		ASTM D7647	>1300	A 30506	137	<u> </u>		
Particles >14µm		ASTM D7647	>160	A 355	12	6 25		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u> </u>	16/14/11	4 /22/16		

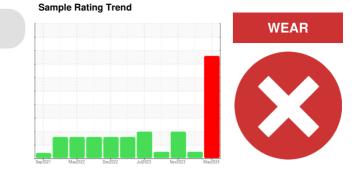
Customer Id: TYSCHIBRU Sample No.: USPM36185 Lab Number: 06184323 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com



RECOM	MENDED	ACTI	ONS

Action Inspect Wear Source	Status	Date	Done By	Description We advise that you inspect for the source(s) of wear.
Change Filter			?	We recommend you service the filters on this component.
Resample			?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS



13 Feb 2024 Diag: Doug Bogart

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report



03 Nov 2023 Diag: Doug Bogart

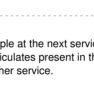
We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



26 Sep 2023 Diag: Doug Bogart

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







OIL ANALYSIS REPORT

Sample Rating Trend WEAR X

Machine Id

MV15 PUMP 151 (S/N 200001524)

Component Vacuum Pump Fluid

USPI VAC 100 (--- GAL)

DIAGNOSIS

A Recommendation

We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

A Wear

The iron level is severe.

Contamination

There is a high amount of particulates present in the oil.

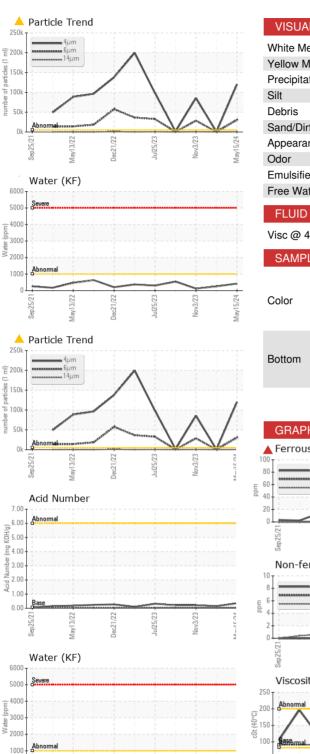
Fluid Condition

The AN level is acceptable for this fluid.

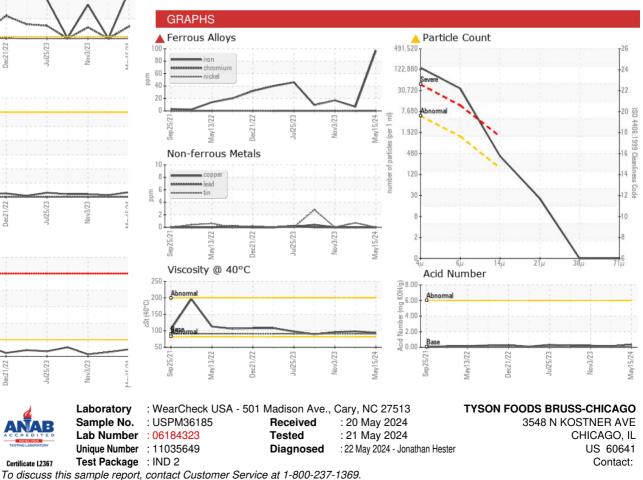
SAMPLE INFORMATION		method	method limit/base current		history1	history2
Sample Number		Client Info		USPM36185	USPM30012	USPM31222
Sample Date		Client Info		15 May 2024	13 Feb 2024	03 Nov 2023
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	4 97	7	17
Chromium	ppm	ASTM D5185m	>20	0	0	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	<1	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	0	0	0
Tin	ppm	ASTM D5185m	>20	0	<1	0
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		<1	<1	0
Magnesium	ppm	ASTM D5185m	0	1	<1	0
Calcium	ppm	ASTM D5185m	0	0	3	0
Phosphorus	ppm	ASTM D5185m	1800	689	804	898
Zinc	ppm	ASTM D5185m	0	4	0	4
Sulfur	ppm	ASTM D5185m	0	130	67	79
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	6	4	8
Sodium	ppm	ASTM D5185m		7	1	<1
Potassium	ppm	ASTM D5185m	>20	3	<1	<1
Water	%	ASTM D6304	>.1	0.042	0.025	0.011
ppm Water	ppm	ASTM D6304	>1000	423	254	116.7
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	A 119895	593	▲ 85897
Particles >6µm		ASTM D7647	>1300	<u> </u>	137	▲ 28626
Particles >14µm		ASTM D7647	>160	<u> </u>	12	6 25
Particles >21µm		ASTM D7647	>40	22	3	<u>∧</u> 76
Particles >38µm		ASTM D7647	>10	0	0	3
Particles >71µm		ASTM D7647	>3	0	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	A 24/22/16	16/14/11	▲ 24/22/16
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.35	0.15	0.21



OIL ANALYSIS REPORT



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	NONE
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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91	94.1	98.3	96.2
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Color						
Bottom						



* - 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)

Certificate 12367

Nov3/23

May13/22

Sep25/2

Contact/Location: ? ? - TYSCHIBRU