

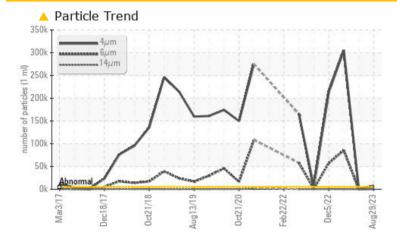
PROBLEM SUMMARY

Sample Rating Trend ISO

VM-6-VPPB (S/N C-4959)

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status			ATTENTION	NORMAL	SEVERE		
Particles >4µm	ASTM D7647	>5000	<u> </u>	1185	▲ 305084		
Oil Cleanliness	ISO 4406 (c)	>19/17/14	 20/17/12	17/16/13	🔺 25/24/15		

Customer Id: TYSJOSPRO Sample No.: USPM29450 Lab Number: 05938983 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 <u>dougb@wearcheckusa.com</u>

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

21 May 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.



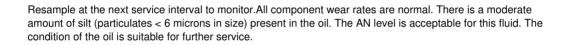
view report

29 Dec 2022 Diag: Doug Bogart

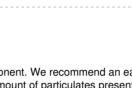


. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.The iron level is severe. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid.

05 Dec 2022 Diag: Doug Bogart









OIL ANALYSIS REPORT

Sample Rating Trend

Machine Id VM-6-VPPB (S/N C-4959) Component

Pump Fluid

USPI VAC 100 (--- GAL)

DIAGNOSIS

A Recommendation

Resample at the next service interval to monitor.

Wear

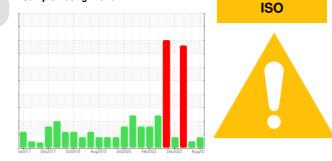
All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. There is a trace of moisture present in the oil.

Fluid Condition

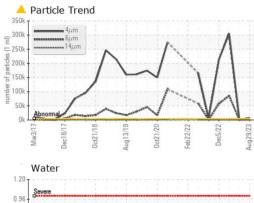
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

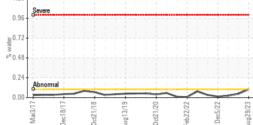


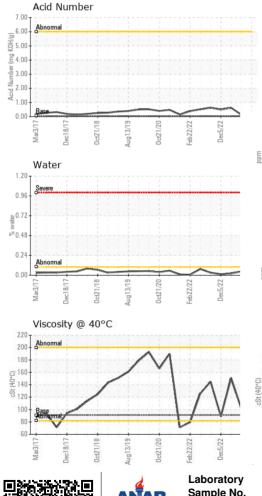
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM29450	USPM28133	USPM25496
Sample Date		Client Info		29 Aug 2023	21 May 2023	29 Dec 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	<1	0	• 422
Chromium	ppm	ASTM D5185m	>5	0	0	<1
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	2
Lead	ppm	ASTM D5185m	>12	0	0	0
Copper	ppm	ASTM D5185m	>30	0	0	0
Tin	ppm	ASTM D5185m	>9	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	2	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	0	<1	0	0
Calcium	ppm	ASTM D5185m	0	0	0	2
Phosphorus	ppm	ASTM D5185m	1800	749	780	995
Zinc	ppm	ASTM D5185m	0	0	0	9
Sulfur	ppm	ASTM D5185m	0	0	0	16
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	5	7	9
Sodium	ppm	ASTM D5185m		0	0	105
Potassium	ppm		>20	<1	<1	2
Water	%	ASTM D6304		0.100	0.046	0.022
ppm Water	ppm	ASTM D6304	>.1	1002.7	461.4	222.8
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	A 7175	1185	▲ 305084
Particles >6µm		ASTM D7647	>1300	1136	414	▲ 85675
Particles >14µm		ASTM D7647	>160	26	53	1 68
Particles >21µm		ASTM D7647	>40	7	10	7
Particles >38µm		ASTM D7647	>10	1	1	2
Particles >71µm		ASTM D7647	>3	0	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u> </u>	17/16/13	▲ 25/24/15
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.074	0.133	0.621



OIL ANALYSIS REPORT

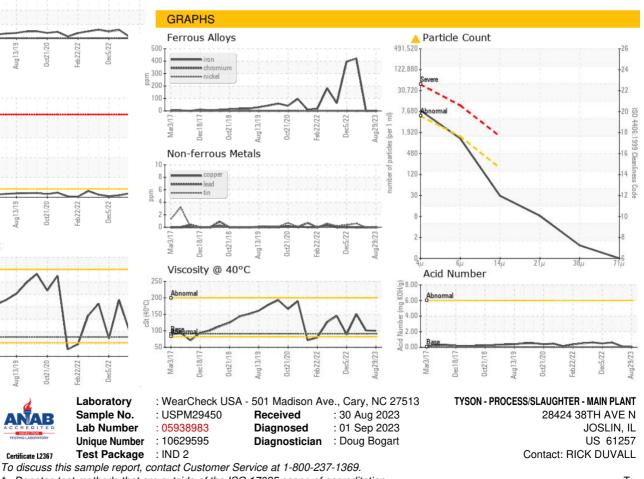






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calar			NONE	NONE	NONE
	*Visual	NORM		HOHL	NONL
		NORML	NORML	NORML	NORML
calar	*Visual	NORML	NORML	NORML	NORML
calar	*Visual		NEG	NEG	NEG
calar	*Visual		NEG	NEG	NEG
S	method	limit/base	current	history1	history2
St	ASTM D445	91	99.8	101	151
	method	limit/base	current	history1	history2
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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)

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Contact/Location: RICK DUVALL - TYSJOSPRO