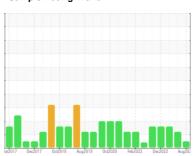


# **OIL ANALYSIS REPORT**

## Sample Rating Trend



**NORMAL** 



# WM-7-VPS (S/N UO72203598)

Component Pump Fluid

**USPI VAC 100 (--- GAL)** 

## Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is a trace of moisture present in the oil. The amount and size of particulates present in the system are acceptable.

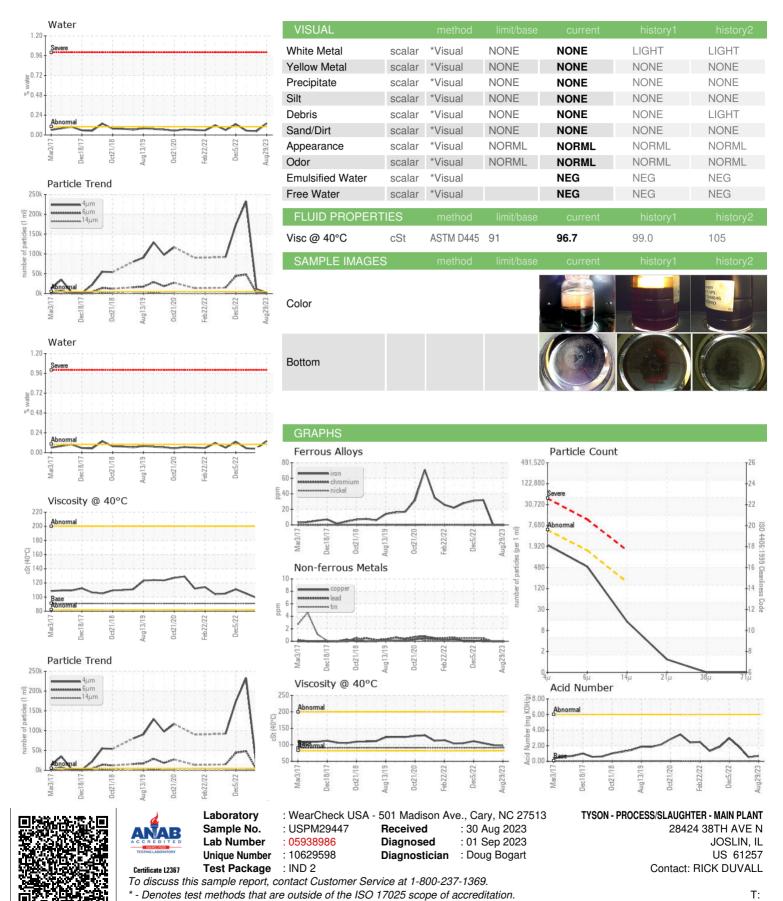
### **Fluid Condition**

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

		lar2017 Dec	2017 Oct2018 Aug201	19 Oct2020 Feb2022 Dec2	022 Aug202	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM29447	USPM28137	USPM25500
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				NORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	0	<1	32
Chromium	ppm	ASTM D5185m	>5	0	0	0
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	<1
Lead	ppm	ASTM D5185m	>12	0	0	<1
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	0
Magnesium	ppm	ASTM D5185m	0	<1	<1	0
Calcium	ppm	ASTM D5185m	0	0	<1	<1
Phosphorus	ppm	ASTM D5185m	1800	875	888	1643
Zinc	ppm	ASTM D5185m	0	<1	0	22
Sulfur	ppm	ASTM D5185m	0	6	0	27
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	21	19	4
Sodium	ppm	ASTM D5185m		0	0	14
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water	%	ASTM D6304		0.142	0.045	0.053
ppm Water	ppm	ASTM D6304	>.1	1423.8	459.3	531.7
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4μm		ASTM D7647	>5000	1860	<u>▲</u> 11713	<u>▲</u> 232818
Particles >6µm		ASTM D7647	>1300	447	<u>^</u> 2189	<b>48404</b>
Particles >14µm		ASTM D7647	>160	12	97	<u>\$\text{\tint{\text{\tin}\text{\tex{\tex</u>
Particles >21µm		ASTM D7647	>40	1	20	31
Particles >38µm		ASTM D7647	>10	0	1	2
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/16/11	<u>21/18/14</u>	<u>\$\rightarrow\$ 25/23/15</u>
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.69	0.52	1.881



## **OIL ANALYSIS REPORT**



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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