

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# Machine Id VM-6-VPS (S/N C5495) Component

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 INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM29446	USPM28134	USPM25497
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	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	0	<1	<1
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>7	0	<1	0
Lead	ppm	ASTM D5185m	>12	0	0	0
Copper	ppm	ASTM D5185m	>30	6	4	4
Tin	ppm	ASTM D5185m	>9	0	0	0
Vanadium	ppm	ASTM D5185m		0	<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	2	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	0	0	4	0
Calcium	ppm	ASTM D5185m	0	0	7	0
Phosphorus	ppm	ASTM D5185m	1800	382	443	<b>1</b> 43
Zinc	ppm	ASTM D5185m	0	0	0	2
Sulfur	ppm	ASTM D5185m	0	255	48	<b>4</b> 954
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	22	21	48
Sodium	ppm	ASTM D5185m		0	2	0
Potassium	ppm	ASTM D5185m	>20	1	2	0
Water	%	ASTM D6304		0.053	0.016	<b>0.166</b>
ppm Water	ppm	ASTM D6304	>.1	530.3	164.9	▲ 1660
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	912	1053	
Particles >6µm		ASTM D7647	>1300	247	238	
Particles >14µm		ASTM D7647	>160	13	19	
Particles >21µm		ASTM D7647	>40	3	6	
Particles >38µm		ASTM D7647	>10	0	0	
Particles >71µm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/11	17/15/11	

FLUID DEGRADATION

mg KOH/g ASTM D8045 0.05

Acid Number (AN)

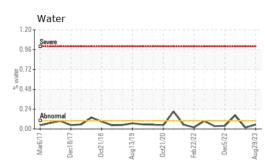
0.189

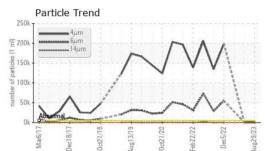
0.081

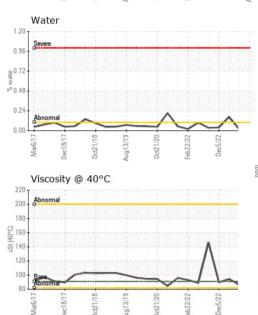
0.163

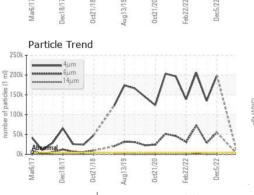


# **OIL ANALYSIS REPORT**





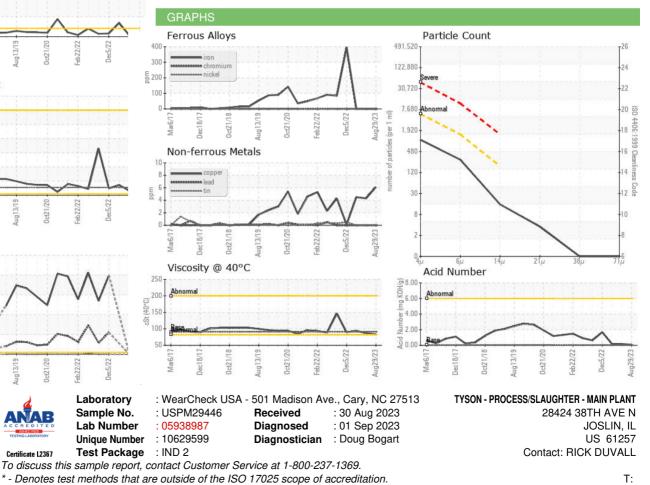




鎬

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE
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	🔺 MODER
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		NEG	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91	83.3	86.3	94.2
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						445 445 4507 4700 1

Bottom



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

Contact/Location: RICK DUVALL - TYSJOSPRO

T: F: (402)423-6661