

### **OIL ANALYSIS REPORT**

#### Sample Rating Trend

DIRT

Machine Id

# VM-2-VPP (S/N UO83004536-1) Pump

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

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Elemental level of silicon (Si) above normal. 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.

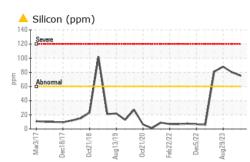
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM36673	USPM31671	USPM29449
Sample Date		Client Info		15 Apr 2024	26 Dec 2023	29 Aug 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				MARGINAL	MARGINAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	10	3	<1
Chromium	ppm	ASTM D5185m	>5	<1	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	0
Lead	ppm	ASTM D5185m	>12	0	0	0
Copper	ppm	ASTM D5185m	>30	<1	<1	<1
Tin	ppm	ASTM D5185m	>9	0	0	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	2
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	1	0	0
Phosphorus	ppm	ASTM D5185m	1800	838	700	786
Zinc	ppm	ASTM D5185m	0	<1	0	0
Sulfur	ppm	ASTM D5185m	0	64	50	39
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	<b>^</b> 75	<b>8</b> 0	<b>8</b> 8
Sodium	ppm	ASTM D5185m		2	0	0
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water	%	ASTM D6304	>.1	0.022	0.052	0.087
ppm Water	ppm	ASTM D6304	>1000	228	521	878.3
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	3966	524	1893
Particles >6µm		ASTM D7647	>1300	1183	119	517
Particles >14µm		ASTM D7647	>160	41	9	15
Particles >21µm		ASTM D7647	>40	4	2	3
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13	16/14/10	18/16/11
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.16	0.20	0.10

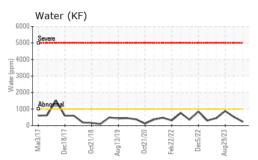
Contact/Location: RICK DUVALL - TYSJOSPRO Page 1 of 2

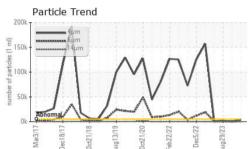


## **OIL ANALYSIS REPORT**

method







Water (KF)

600

500

3000 Water (

2000

100

400

35

150

100

**Mar3/1** 

Dec18/17 1/1CH0



limit/base

current

Color

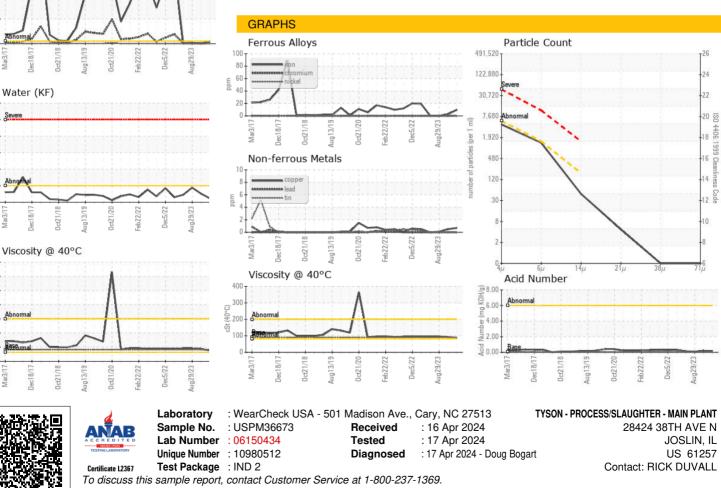
VISUAL



history1

history2

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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