

## **OIL ANALYSIS REPORT**

ISO

#### Machine Id

# TR-1-VP (S/N UO52002657) 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 high amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

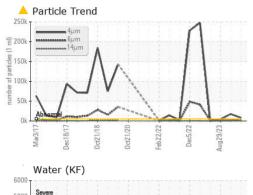
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

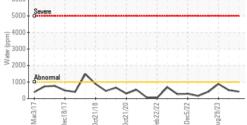
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM36705	USPM31662	USPM29457
Sample Date		Client Info		15 Apr 2024	26 Dec 2023	29 Aug 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	8	9	9
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	<1	1
Lead	ppm	ASTM D5185m	>12	0	0	<1
Copper	ppm	ASTM D5185m	>30	0	0	0
Tin	ppm	ASTM D5185m	>9	<1	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	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	<1
Calcium	ppm	ASTM D5185m	0	10	17	21
Phosphorus	ppm	ASTM D5185m	1800	724	540	638
Zinc	ppm	ASTM D5185m	0	0	5	10
Sulfur	ppm	ASTM D5185m	0	0	20	5
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	4	4	4
Sodium	ppm	ASTM D5185m		5	6	5
Potassium	ppm	ASTM D5185m	>20	0	0	1
Water	%	ASTM D6304	>.1	0.042	0.050	0.088
ppm Water	ppm	ASTM D6304	>1000	422	510	885.4
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	8257	17516	3173
Particles >6µm		ASTM D7647	>1300	<u> </u>	▲ 3820	873
Particles >14µm		ASTM D7647	>160	95	127	38
Particles >21µm		ASTM D7647	>40	9	14	6
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/19/14</b>	▲ 21/19/14	19/17/12
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.085	0.09	0.076

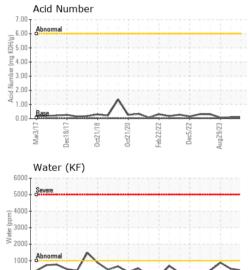
Contact/Location: RICK DUVALL - TYSJOSPRO Page 1 of 2

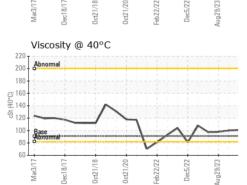


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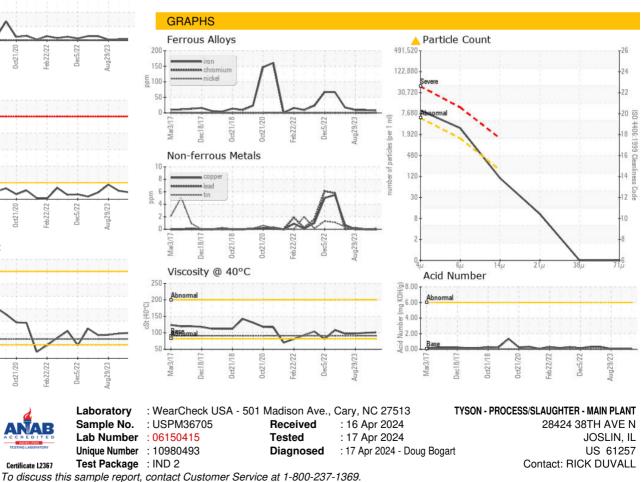






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	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 PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91	101	100	97.7
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Pottom						

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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