

# **PROBLEM SUMMARY**

# VP-16 (S/N C-4191)

Pump Fluid USPI VAC 100 (--- GAL)

#### COMPONENT CONDITION SUMMARY 🔺 Water 1.20 Severe 0.96 .0.72 • water <sup>يو</sup> 0.24 Abnormal 0.00 Sep26/19 -Mar6/18 Vov27/18 Sep16/20. Nov16/21 Vov15/22 Mar8/

#### RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status				MARGINAL	NORMAL	NORMAL	
Water	%	ASTM D6304		<b>A</b> 0.108	0.027	0.022	
ppm Water	ppm	ASTM D6304	>.1	<b>1080.4</b>	278.0	227.0	

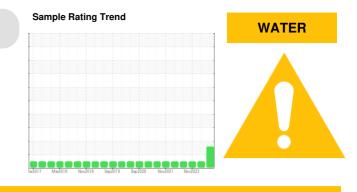
Customer Id: JBSBRO Sample No.: USPM27082 Lab Number: 05901880 Test Package: IND 2



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 <u>customerservice@wearcheck.com</u>



#### **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

#### HISTORICAL DIAGNOSIS

#### 28 Feb 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.



#### 15 Nov 2022 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.







21 Jul 2022 Diag: Jonathan Hester

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.





## **OIL ANALYSIS REPORT**

#### Sample Rating Trend



VP-16 (S/N C-4191) 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 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.

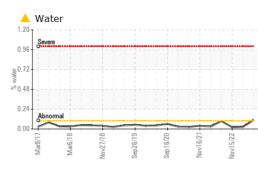


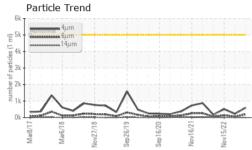


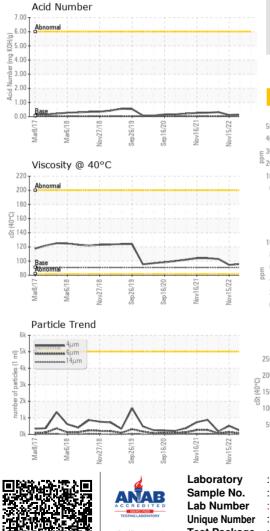
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM27082	USPM26765	USPM24868
Sample Date		Client Info		17 Jul 2023	28 Feb 2023	15 Nov 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				MARGINAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	2	0	0
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	2	0	0
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	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	0	0	0	0
Calcium	ppm	ASTM D5185m	0	0	0	0
Phosphorus	ppm	ASTM D5185m	1800	898	789	868
Zinc	ppm	ASTM D5185m	0	0	0	0
Sulfur	ppm	ASTM D5185m	0	0	0	12
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	4	4	3
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water	%	ASTM D6304		<b>0.108</b>	0.027	0.022
ppm Water	ppm	ASTM D6304	>.1	▲ 1080.4	278.0	227.0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	596	225	509
Particles >6µm		ASTM D7647	>1300	198	63	144
Particles >14µm		ASTM D7647	>160	10	5	12
Particles >21µm		ASTM D7647	>40	2	1	5
Particles >38µm		ASTM D7647	>10	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	16/15/10	15/13/10	16/14/11
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.23	0.15	0.12



# **OIL ANALYSIS REPORT**

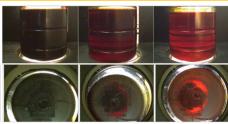




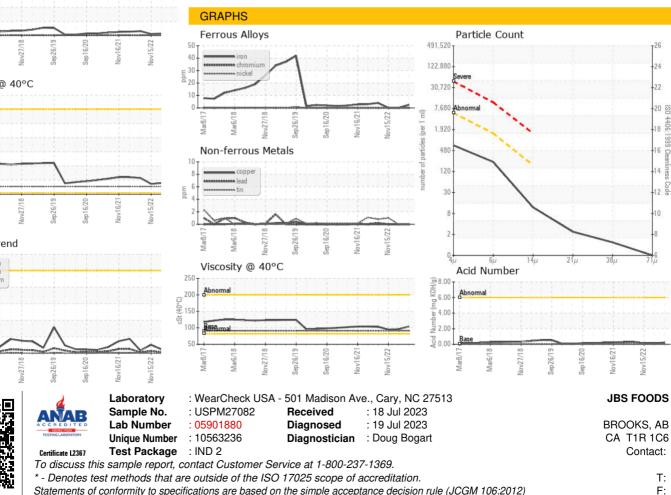


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual		NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91	104	95.8	94.7
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color



Bottom



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

Contact/Location: ? ? - JBSBRO

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