

### **OIL ANALYSIS REPORT**

#### Sample Rating Trend

#### NORMAL

# BUSCH VM7 / VP-1 (S/N 2512909)

Pump Fluid USPI VAC 100 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

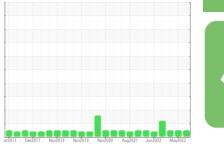
All component wear rates are normal.

#### 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.

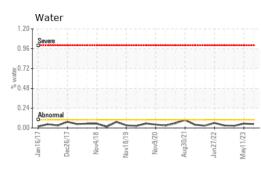


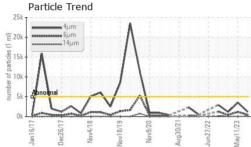


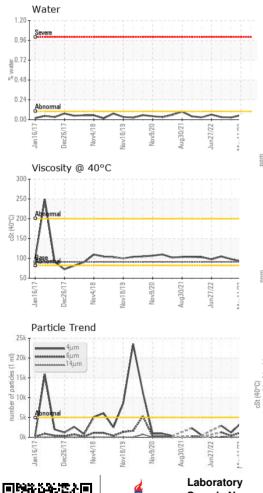
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM29237	USPM28926	USPM26264
Sample Date		Client Info		19 Aug 2023	11 May 2023	26 Jan 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	3	3	3
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	<1	0	<1
Lead	ppm	ASTM D5185m	>12	0	0	0
Copper	ppm	ASTM D5185m	>30	0	0	0
Tin	ppm	ASTM D5185m	>9	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	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	2	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	2	2	<1
Phosphorus	ppm	ASTM D5185m	1800	1032	1287	1375
Zinc	ppm	ASTM D5185m	0	8	10	3
Sulfur	ppm	ASTM D5185m	0	54	107	95
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	3	3	2
Sodium	ppm	ASTM D5185m		6	1	1
Potassium	ppm	ASTM D5185m	>20	<1	1	0
Water	%	ASTM D6304		0.047	0.053	0.026
ppm Water	ppm	ASTM D6304	>.1	470.9	531.6	265.2
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1187	3535	1182
Particles >6µm		ASTM D7647	>1300	440	1163	400
Particles >14µm		ASTM D7647	>160	79	64	28
Particles >21µm		ASTM D7647	>40	22	11	5
Particles >38µm		ASTM D7647	>10	2	1	0
Particles >71µm		ASTM D7647	>3	1	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/16/13	19/17/13	17/16/12
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.28	0.35	0.27



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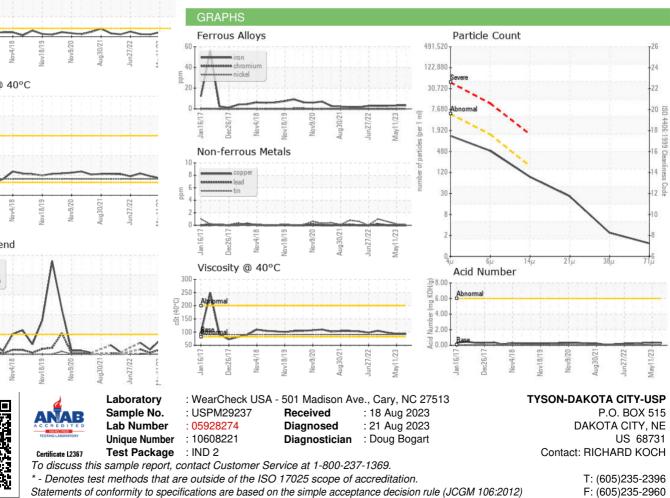






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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 PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91	92.8	92.8	98.2
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color						

Bottom



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