

OIL ANALYSIS REPORT

Sample Rating Trend

WATER

Machine Id BUSCH VP-2C (S/N 5595722)

Component Vacuum 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 a moderate amount of silt (particulates < 6 microns in size) present in the oil. There is a trace of moisture 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 Date Client Info 01 Jul 2024 31 Mar 2024 07 Ja Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info 0 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Image Image ATTENTION MARGINAL ABNO WEAR METALS method Imit/base current history1 h Iron ppm ASTM D5185m >20 -11 0 0 Nickel ppm ASTM D5185m >20 0 -11 -1 Nickel ppm ASTM D5185m >20 0 0 -1 Silver ppm ASTM D5185m >20 0 0 -1 Silver ppm ASTM D5185m >20 0 0 -1 Copper ppm ASTM D5185m >20 0 0 0	130546 n 2024 DRMAL istory2
Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info N/A N/A N/A N/A Sample Status Image ATTENTION MARGINAL ABNC WEAR METALS method Imit/base current history1 h Iron ppm ASTM D5185m >20 <1 0 0 Chromium ppm ASTM D5185m >20 0 <1 <1 Nickel ppm ASTM D5185m >20 0 0 <1 <1 Nickel ppm ASTM D5185m >20 0 0 <1 <1 Nickel ppm ASTM D5185m >20 0 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 1 <1 <1	RMAL
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status method limit/base current history1 ATTENTION WEAR METALS method limit/base current history1 ABNC Iron ppm ASTM D5185m >20 <1 0 0 Chromium ppm ASTM D5185m >20 0 <1 <1 Nickel ppm ASTM D5185m 20 0 0 <1 Silver ppm ASTM D5185m >20 0 0 <1 Copper ppm ASTM D5185m >20 0 0 <1 Copper ppm ASTM D5185m >20 0 0 <1 Manadium ppm ASTM D5185m >20 0 0 <1 Manadium ppm ASTM D5185m 0 0 0 <1 <t< th=""><th></th></t<>	
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status method limit/base current history1 ATTENTION WEAR METALS method limit/base current history1 ABNC Iron ppm ASTM D5185m >20 <1 0 0 Chromium ppm ASTM D5185m >20 0 <1 <1 Nickel ppm ASTM D5185m 20 0 0 <1 Silver ppm ASTM D5185m >20 0 0 <1 Copper ppm ASTM D5185m >20 0 0 <1 Copper ppm ASTM D5185m >20 0 0 <1 Manadium ppm ASTM D5185m >20 0 0 <1 Manadium ppm ASTM D5185m 0 0 0 <1 <t< th=""><th></th></t<>	
Oil Changed Client Info N/A N/A N/A N/A Sample Status nethod imit/base current history1 A Iron ppm ASTM D5185m >20 <1 0 0 Chromium ppm ASTM D5185m >20 0 <1 <1 Nickel ppm ASTM D5185m >20 0 0 <1 <1 Silver ppm ASTM D5185m >20 0 0 0 <1 <1 Silver ppm ASTM D5185m >20 0 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 1 <1 <1	
Sample Status Image: Control of the status ATTENTION MARGINAL ABNO WEAR METALS method limit/base current history1 h Iron ppm ASTM D5185m >20 <1 0 0 Chromium ppm ASTM D5185m >20 0 <1 <1 Nickel ppm ASTM D5185m >20 0 0 <1 <1 Nickel ppm ASTM D5185m >20 0 0 <1 <1 Nickel ppm ASTM D5185m >20 0 0 <1 <1 Silver ppm ASTM D5185m >20 0 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 1	
WEAR METALS method limil/base current history1 r Iron ppm ASTM D5185m >20 <1 0 0 Chromium ppm ASTM D5185m >20 0 <1 <1 Nickel ppm ASTM D5185m >20 0 0 <1 <1 Titanium ppm ASTM D5185m 0 0 0 <1 <1 Silver ppm ASTM D5185m >20 0 0 <1 <1 Copper ppm ASTM D5185m >20 0 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 1 1	
Iron ppm ASTM D5185m >20 <1	istory2
Chromium ppm ASTM D5185m >20 0 <1	
Nickel ppm ASTM D5185m >20 0 0 <1	
Titanium ppm ASTM D5185m 0 0 <1	
Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m<>20 0 0 21 Lead ppm ASTM D5185m<>20 0 0 21 Copper ppm ASTM D5185m >20 0 0 21 Tin ppm ASTM D5185m >20 21 <1	
Aluminum ppm ASTM D5185m >20 0 0 22 Lead ppm ASTM D5185m >20 0 0 <1 Copper ppm ASTM D5185m >20 0 0 <1 Tin ppm ASTM D5185m >20 <1 <1 <1 Vanadium ppm ASTM D5185m >20 <1 <1 <1 Vanadium ppm ASTM D5185m >20 <1 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 <1 ADDITIVES method limit/base current history1 h Boron ppm ASTM D5185m 0 0 0 0 Magnaese ppm ASTM D5185m 0 0 <1 <1 Magnesium ppm ASTM D5185m 0 0 <1 0 Phosphorus ppm ASTM D5185m 0 0 0	
Lead ppm ASTM D5185m >20 0 0 <1	
Copper ppm ASTM D5185m >20 0 0 <1	
Tin ppm ASTM D5185m >20 <1	
Vanadium ppm ASTM D5185m 0	
Cadmium ppm ASTM D5185m 0 0 <1	
ADDITIVES method limit/base current history1 h Boron ppm ASTM D5185m 0 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 0 0 Manganese ppm ASTM D5185m 0	
Boron ppm ASTM D5185m 0 1 <th1< th=""> <th1< th=""> <th1< th=""></th1<></th1<></th1<>	
Barium ppm ASTM D5185m 0 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 <1 <1 Manganese ppm ASTM D5185m 0 0 <1 <1 <1 Magnesium ppm ASTM D5185m 0 0 <1 <1 <1 Magnesium ppm ASTM D5185m 0 0 <1 <1 <1 Magnesium ppm ASTM D5185m 0 0 <1 <1 0 Phosphorus ppm ASTM D5185m 0 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 0 Solicon ppm ASTM D5185m 0 0 0 18 0 CONTAMINANTS method limit/base current history1 h Silicon ppm ASTM D5185m >15 3 3	istory2
Molybdenum ppm ASTM D5185m 0 0 0 <1	
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 0 0 0 Calcium ppm ASTM D5185m 0 0 <1 0 Phosphorus ppm ASTM D5185m 1800 857 848 81 Zinc ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 18 0 CONTAMINANTS method limit/base current history1 h Silicon ppm ASTM D5185m >15 3 3 3 Sodium ppm ASTM D5185m >20 <1 0 <1 Potassium ppm ASTM D6304 >.1 0.134 0.1111 0.0 ppm Water ppm ASTM D6304 >1000 1345 1112 62 FLUID CLEANLINESS method limit/base current history1 <th></th>	
Manganese ppm ASTM D5185m 0 0 <1	
Magnesium ppm ASTM D5185m 0	
Calcium ppm ASTM D5185m 0 0 <1	
Phosphorus ppm ASTM D5185m 1800 857 848 81 Zinc ppm ASTM D5185m 0 </th <th></th>	
Zinc ppm ASTM D5185m 0	3
Sulfur ppm ASTM D5185m 0 0 18 0 CONTAMINANTS method limit/base current history1 h Silicon ppm ASTM D5185m >15 3 3 3 Sodium ppm ASTM D5185m >15 3 3 3 Potassium ppm ASTM D5185m >20 <1 0 <1 Water % ASTM D6304 >.1 \triangle 0.134 \triangle 0.111 0.0 ppm Water ppm ASTM D6304 >.1000 \triangle 1345 1112 62 FLUID CLEANLINESS method limit/base current history1 h	
Silicon ppm ASTM D5185m >15 3 3 3 Sodium ppm ASTM D5185m <1	
Sodium ppm ASTM D5185m <1	istory2
Potassium ppm ASTM D5185m >20 <1	
Water % ASTM D6304 >.1 A 0.134 0.111 0.0 ppm Water ppm ASTM D6304 >1000 1345 1112 62 FLUID CLEANLINESS method limit/base current history1 h	
ppm Water ppm ASTM D6304 >1000 A 1345 A 1112 62 FLUID CLEANLINESS method limit/base current history1 h	
FLUID CLEANLINESS method limit/base current history1 h	
	62
Particles >4µm ASTM D7647 >5000 - 5761 2028 🔺 10	
Particles >6μm ASTM D7647 >1300 1290 510 68	istory2
Particles >14μm ASTM D7647 >160 37 27 30	1 istory2 594
Particles >21μm ASTM D7647 >40 4 6 10	1 istory2 594
Particles >38μm ASTM D7647 >10 0 2	1 istory2 594
Particles >71µm ASTM D7647 >3 0 0 0	1 istory2 594
	1 istory2 594
FLUID DEGRADATION method limit/base current history1 h	1 istory2 594
Acid Number (AN) mg KOH/g ASTM D8045 0.05 0.16 0.071 0.0	1 istory2 594 6

Contact/Location: SERVICE MANAGER ? - TYSAMAPRO



particles (1

Water

Acid Nu 2.00

1.00

220

200

180

120

100

ĕ

OIL ANALYSIS REPORT

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

>.1

91

*Visual

ASTM D445

scalar

scalar

scalar

scalar

scalar

scalar

scalar

cSt

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

95.5

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

101

NONE

NONE

NONE

NONE

NONE

NONE

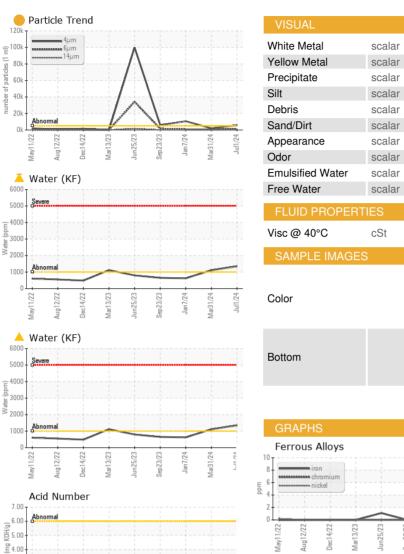
NORML

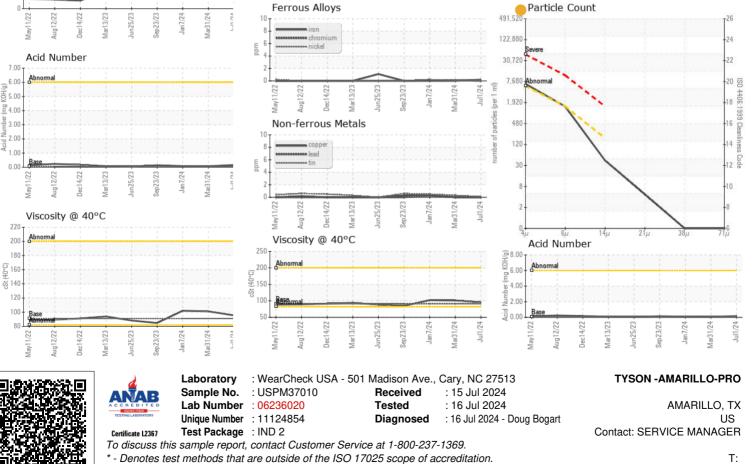
NORML

NEG

NEG

102





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

Report Id: TYSAMAPRO [WUSCAR] 06236020 (Generated: 07/16/2024 12:56:40) Rev: 1

Contact/Location: SERVICE MANAGER ? - TYSAMAPRO

F: