

OIL ANALYSIS REPORT

Sample Rating Trend



BUSCH 11 L-4 STG-1 (S/N 5603417)

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.

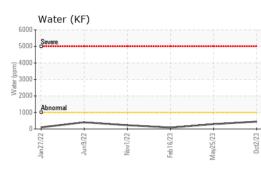
Fluid Condition

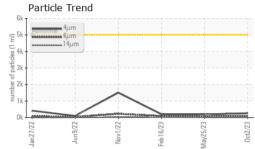
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

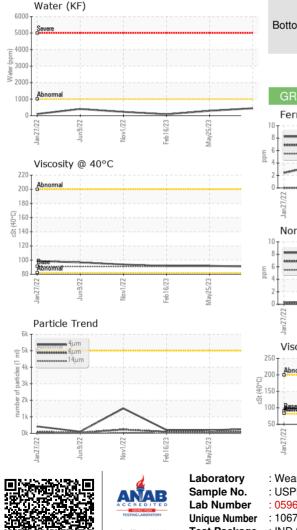
Nickel ppm ASTM D5185m >5 0 <1			Jan2022	Jun2022 Nov2022	Feb2023 May2023	0ct2023	
Sample Date Client Info 02 Oct 2023 25 May 2023 16 Feb 2023 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A NORMAL NORMAL NORMAL WEAR METALS method Imit/base current history1 history1 Iron ppm ASTM 05165m >5 0 <1 0 Nickel ppm ASTM 05165m >3 0 <1 0 Aluminum ppm ASTM 05165m >7 <1 1 0 Lead ppm ASTM 05165m >12 0 <1 0 Vanadium ppm ASTM 05165m >2 0 <1 0 Addiminum ppm ASTM 05165m 0 2 0 0 Vanadium	SAMPLE INFORM	ΛΑΤΙΟΝ	method				history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185m >90 5 6 8 Chromium ppm ASTM 05185m >5 0 <1	Sample Number		Client Info		USPM29794	USPM28304	USPM26588
Oil Age Inrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A NORMAL NORMAL NORMAL NORMAL WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185m >55 0 <1	Sample Date		Client Info		02 Oct 2023	25 May 2023	16 Feb 2023
Oil Age Inrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A NORMAL NORMAL NORMAL NORMAL WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185m >55 0 <1	Machine Age	hrs	Client Info		0	0	0
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Sample Status More method Imit/base current history1 history2 Iron ppm ASTM D5185m >5 0 <1	-		Client Info		N/A	N/A	N/A
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Nickel ppm ASTM D5185m >5 0 <1 0 Titanium ppm ASTM D5185m >3 0 <1	Chromium		ASTM D5185m	>5			
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Silver ppm ASTM D5185m >3 0 <1 0 Aluminum ppm ASTM D5185m >7 <1					-		
Aluminum ppm ASTM D5185m >7 <1 1 0 Lead ppm ASTM D5185m >12 0 <1					-		
Lead ppm ASTM D5185m >12 0 <1 0 Copper ppm ASTM D5185m >30 <1					-		
Copper ppm ASTM D5185m >30 <1 <1 0 Tin ppm ASTM D5185m >9 0 <1							
Tin ppm ASTM D5185m >9 0 <1 0 Vanadium ppm ASTM D5185m 0 <1					-		
Vanadium ppm ASTM D5185m 0 <1 0 Cadmium ppm ASTM D5185m 0 <1							
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ppm Water ppm ASTM D6304 >1000 447.9 293.6 86.3 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 265 192 202 Particles >6µm ASTM D7647 >1300 87 68 90 Particles >6µm ASTM D7647 >160 11 10 16 Particles >14µm ASTM D7647 >40 4 2 8 Particles >21µm ASTM D7647 >10 1 1 1 Particles >38µm ASTM D7647 >3 0 1 0 Oil Cleanliness ISO 4406 (c) 19/17/14 15/14/11 15/13/10 15/14/11 FLUID DEGRADATION method limit/base current history1 history2	Water	%	ASTM D6304	>.1	0.044	0.029	0.008
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Particles >71μm ASTM D7647 >3 0 1 0 Oil Cleanliness ISO 4406 (c) >19/17/14 15/14/11 15/13/10 15/14/11 FLUID DEGRADATION method limit/base current history1 history2	-						
Oil Cleanliness ISO 4406 (c) >19/17/14 15/14/11 15/13/10 15/14/11 FLUID DEGRADATION method limit/base current history1 history2							
FLUID DEGRADATION method limit/base current history1 history2							
	FLUID DEGRADA	TION_	method	limit/base	current	historv1	
ACIO INUTIDEI (AIN) INGRUNG ASIM D8045 0.05 U.UK 0.07 0.08							
	Acia Number (AN)	mg KOH/g	ASTM D8045	0.05	0.08	0.07	0.08



OIL ANALYSIS REPORT

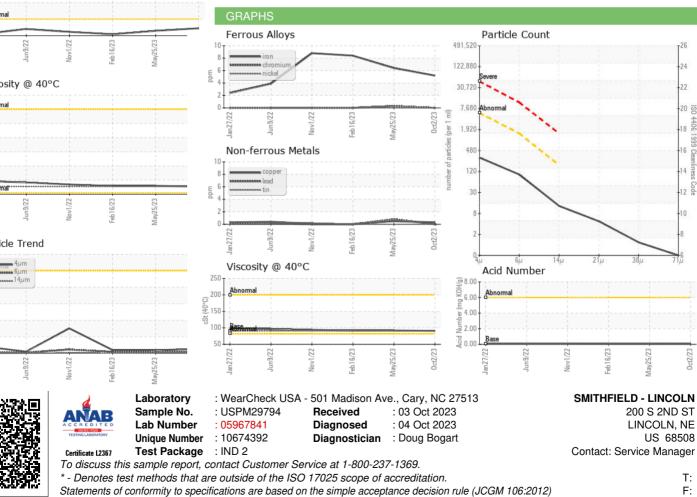






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	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	90.8	91.9	91.6
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color				. 6.		Nr-1 Eli

Bottom



Contact/Location: Service Manager - SMILIN