

## **OIL ANALYSIS REPORT**

Sample Rating Trend



# SCREW PUMP 4

#### Component Gearbox

Fluid FUCHS RENOLIN UNISYN CKC ISO 320 (48 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.

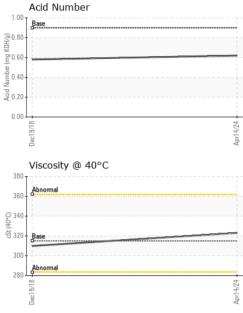
#### Fluid Condition

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

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCAI2002629	PCAI2002631	
Sample Date		Client Info		14 Apr 2024	19 Dec 2018	
Machine Age	yrs	Client Info		0	6	
Oil Age	yrs	Client Info		0	0	
Oil Changed		Client Info		N/A	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	6	9	
Chromium	ppm	ASTM D5185m	>15	<1	<1	
Nickel	ppm	ASTM D5185m	>15	<1	<1	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	2	0	
Lead	ppm	ASTM D5185m	>100	<1	2	
Copper	ppm	ASTM D5185m	>200	<1	0	
Tin	ppm	ASTM D5185m	>25	<1	0	
Antimony	ppm	ASTM D5185m	>5		0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	25	2	5	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		<1	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m		1	<1	
Calcium	ppm	ASTM D5185m	17	4	<1	
Phosphorus	ppm	ASTM D5185m	200	372	321	
Zinc	ppm	ASTM D5185m		0	2	
Sulfur	ppm	ASTM D5185m	5000	6702	4177	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	2	1	
Sodium	ppm	ASTM D5185m		0	<1	
Potassium	ppm	ASTM D5185m	>20	<1	0	
FLUID DEGRAD		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.9	0.62	0.580	



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		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROP	ERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	315	323	309.9	
SAMPLE IMA	GES	method	limit/base	current	history1	history2
Color				no image		no image
Bottom				no image		no image
Dec19/18			Apr14/24			
4						
2 -		865=====0054=======004=====				
		A&&aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	14/24			
		A65aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	Apr14/24			
Viscosity @ 40°	2			Acid Number		
Viscosity @ 40°0	2			Acid Number		
Viscosity @ 40°0	2					
Viscosity @ 40°0	2					
Viscosity @ 40°(	C					
Viscosity @ 40°( 360 360 360 400 360 Base 320 Base	2		April 4/24 April 4/24			
	Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROP Visc @ 40°C SAMPLE IMA Color Bottom Bottom Bottom	Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar Free Water scalar Free Water scalar Free Water scalar Visc @ 40°C cSt SAMPLE IMAGES Color Bottom Bottom GRAPHS Ferrous Alloys Ferrous Alloys	Silt scalar *Visual Debris scalar *Visual Sand/Dirt scalar *Visual Appearance scalar *Visual Odor scalar *Visual Emulsified Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual Color cSt ASTM D445 SAMPLE IMAGES method Color Bottom GRAPHS Ferrous Alloys Mon-ferrous Metals	Silt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual *Visu	Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG Free Water scalar *Visual >0.2 NEG Free Water scalar *Visual NORML NORML Visc @ 40°C cSt ASTM D445 315 323 SAMPLE IMAGES method limit/base current Color <i>no image</i> Bottom <i>no image</i>	Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG Free Water scalar *Visual >0.2 NEG NEG Free Water scalar *Visual NORML NORML NORML Visc @ 40°C cSt ASTM D445 315 323 309.9 SAMPLE IMAGES method limit/base current history1 Visc @ 40°C cSt ASTM D445 315 323 309.9 SAMPLE IMAGES method limit/base current history1 Color no image GRAPHS Ferrous Alloys

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