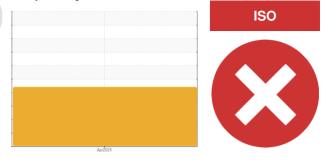




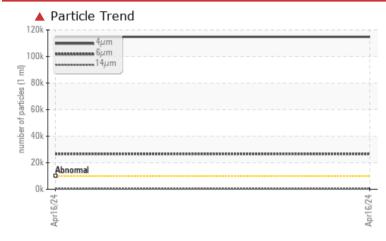
PROBLEM SUMMARY



Machine Id

30TP701B Component Inboard Bearing Fluid R&O OIL ISO 68 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) R&O OIL ISO 68. Please confirm.

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Customer Id: PETMIS Sample No.: WC22119793 Lab Number: 02630183 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

PROBLEMATIC TEST RESULTS

Sample Status		SEVER	E	
Particles >4µm	ASTM D7647	>10000 🔺 1147	'92	
Particles >6µm	ASTM D7647	>2500 🔺 2663		
Particles >14µm	ASTM D7647	>160 🔺 341		
Oil Cleanliness	ISO 4406 (c)	>20/18/14 🔺 24/2	2/16	

RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Description
Change Filter	MISSED	Apr 22 2024	?	We recommend you service the filters on this component.
Resample	MISSED	Apr 22 2024	?	Resample in 30-45 days to monitor this situation.
Alert	MISSED	Apr 22 2024	?	Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment.
Information Required	MISSED	Apr 22 2024	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	MISSED	Apr 22 2024	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	MISSED	Apr 22 2024	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT



Machine Id

30TP701B Component Inboard Bearing Fluid R&O OIL ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) R&O OIL ISO 68. Please confirm.

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

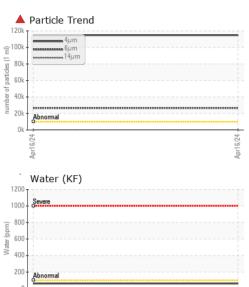
There is a high amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

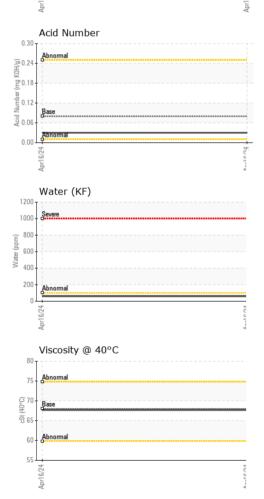
Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC22119793		
Sample Date		Client Info		16 Apr 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				SEVERE		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	3		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	<1		
Lead	ppm	ASTM D5185(m)	>20	0		
Copper	ppm	ASTM D5185(m)	>20	1		
Tin	ppm	ASTM D5185(m)	>20	3		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	0		
Barium	ppm	ASTM D5185(m)	5	0		
Molybdenum	ppm	ASTM D5185(m)	5	0		
Manganese	0000	ASTM D5185(m)		0		
0	ppm	ASTIVI DOTOO(III)		•		
Magnesium	ppm	ASTM D5185(m) ASTM D5185(m)	5	۰ <1		
0		()	5 5	-		
Magnesium	ppm	ASTM D5185(m)		<1		
Magnesium Calcium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	5	<1 <1		
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 100	<1 <1 5		
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 100 25	<1 <1 5 3		
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 100 25	<1 <1 5 3 651		
Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 100 25 1500 limit/base	<1 <1 5 3 651 <1		
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 100 25 1500 limit/base >15	<1 <1 5 3 651 <1 current		
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 100 25 1500 limit/base >15	<1 <1 5 3 651 <1 current 0		
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method ASTM D5185(m) ASTM D5185(m)	5 100 25 1500 limit/base >15	<1 <1 5 3 651 <1 <u>current</u> 0 0		
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 100 25 1500 limit/base >15 >20	<1 <1 5 3 651 <1 <u>current</u> 0 0 <1	 history1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 100 25 1500 limit/base >15 >20	<1 <1 5 3 651 <1 <u>current</u> 0 0 <1 0.006	 history1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5304*	5 100 25 1500 limit/base >15 >20 >2	<1 <1 5 3 651 <1 <u>current</u> 0 0 <1 0.006 61	 history1 	 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D6304* ASTM D6304*	5 100 25 1500 limit/base >15 >20 >2 limit/base >10000	<1 <1 5 3 651 <1 0 0 0 <1 0.006 61 current	 history1 history1	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5304* ASTM D6304*	5 100 25 1500 limit/base >15 >20 >2	<1 <1 5 3 651 <1 0 0 <1 0.006 61 current 114792 	 history1 history1	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5304* ASTM D6304* ASTM D6304* ASTM D7647 ASTM D7647 ASTM D7647	5 100 25 1500 limit/base >15 >20 >2 2 limit/base >10000 >2500 >160	<1 <1 <1 5 3 651 <1 0 0 <1 0.006 61 current 26635 341 	 history1 history1	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5047 ASTM D7647 ASTM D7647 ASTM D7647	5 100 25 1500 limit/base >15 >20 >2 limit/base >10000 >2500 >160 >40	<1 <1 <1 5 3 651 <1 0 0 <1 0.006 61 current ▲ 114792 ▲ 26635 ▲ 341 ● 62 	 history1 history1 	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5304* ASTM D6304* ASTM D6304* ASTM D7647 ASTM D7647 ASTM D7647	5 100 25 1500 limit/base >15 >20 >2 2 limit/base >10000 >2500 >160	<1 <1 <1 5 3 651 <1 0 0 <1 0.006 61 current 26635 341 	 history1 history1	 history2 history2







OIL ANALYSIS REPORT

	FLUID DEGRAD	ATION	method	limit/base	current	history1	history
	Acid Number (AN)	mg KOH/g	ASTM D974*	0.08	0.03		
	VISUAL		method	limit/base	current	history1	history
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Precipitate	scalar	Visual*	NONE	NONE		
3/24	Silt	scalar	Visual*	NONE	NONE		
Apr16/24	Debris	scalar	Visual*	NONE	VLITE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>2	.2%		
	Free Water	scalar	Visual*		NEG		
	FLUID PROPER	TIES	method	limit/base	current	history1	history
	Visc @ 40°C	cSt	ASTM D7279(m)	68	67.7		
Apr16/24 -	SAMPLE IMAGE	S	method	limit/base	current	history1	history
Ap							
	Color					no image	no imag
	Bottom					no image	no imag
	GRAPHS						
(c. 3 t.	Ferrous Alloys			491,52	Particle Count	I	
A.	iron						
	E 5-			122,88	Severe		
				30,72	Abnormal		
	0	*******		± € 7,68			
	Apr16/24			Apr16/24 particles (per 1 ml) 760'/		.	
	<			V saloiti 48			
	Non forrous Moto						
	Non-ferrous Meta	115				~	
	10 copper	115				/.	
e constantino de la c	¹⁰ T	115		4)-		
COTT	E 5	115		and a second sec)-		
And C CHA	E 5			to 12 gunne 3) -) -		
P F. D. B.	E 5			to 12 gunne 3) -) - 3 -		
A L L L L L L L L L L L L L L L L L L L	ue s			Apr16/24	0- - - - - - - - - - - - - -	14μ 21μ	38µ 7
AACDAA	Viscosity @ 40°C			Apr16/24	0- - - - - - - - - - - - - -	14μ 21μ	38µ 7
And COA	Viscosity @ 40°C			Apr16/24	0- - - - - - - - - - - - - -	14µ 21µ	38µ 7
Protocola	Viscosity @ 40°C			Apr16/24	0- - - - - - - - - - - - - -	14μ 21μ	38µ 7
υ	Viscosity @ 40°C			Apr16/24	0- - - - - - - - - - - - - -	14µ 21µ	38µ 7
The form	Viscosity @ 40°C			40 unmper Whot (B254 Whot (B254 Value (Inter Value (Inter)) (Inter Value (Inter Value (Inter Value (Inter Value (Inter Val	Acid Number	14μ 21μ	38µ 7
	Viscosity @ 40°C			40 unmper Whot (B254 Whot (B254 Value (Inter Value (Inter)) (Inter Value (Inter Value (Inter Value (Inter Value (Inter Val	Acid Number	14μ 21μ	38µ 7
Autona	Viscosity @ 40°C			Apr16/24 Apr16/24 Apr16/24 010 Add Number (mp K0H/g) 010 Add Number (mp K0H/g)	Acid Number Abnormal Abnormal Abnormal		
Laboratory Sample No.	Viscosity @ 40°C	75 Appleby Recei	i ved : 19	(0) (0, 0, 3) (0) (0, 0, 12) (0) (0, 12) (0) (0) (0, 12) (0)	Acid Number Abnormal Abnormal Abnormal	Petro Canada L 385 Sc	ubricants
Sample No. 5:2017 Lab Number	Viscosity @ 40°C	75 Appleby Recei Teste	ived : 19 d : 22	(0)(0.0.3) (0)(0.0.2) (0)(0.0.2) (0)(0.0.3) (0)(0.0.2) (0)(0.0.3) (0)(0.0.2) (0)(0.0.3) (0)(0)(0.0.3) (0)(0)(0.0.3) (0)(0)(0.0.3) (0)(0)(0.0.3) (0)(0)(0)(0.0.3) (0)(0)(0)(0.0.3) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(Acid Number Acid Number Abnormal Abnormal Abnormal Abnormal	Petro Canada L 385 Sc	ubricants buthdown R ississauga,
Sample No. 5:2017 Lab Number Unique Number	Viscosity @ 40°C	75 Appleby Recei Teste Diagr	ived : 19 d : 22	(0) (0, 0, 3) (0) (0, 0, 12) (0) (0, 12) (0) (0) (0) (0, 12) (0)	Acid Number Acid Number Abnormal Abnormal Abnormal Abnormal	Petro Canada L 385 Sc M	ubricants buthdown R ississauga, CA L5J
Sample No. 5:2017 Lab Number ited Unique Number tory Test Package	Viscosity @ 40°C	75 Appleby Recei Teste Diagr	ived : 19 id : 22 nosed : 22	(0)(0.0.3) (0)(0.0.2) (0)(0.0.4) (0)(0)(0.0.4) (0)(0)(0.4) (0)(0)(0.4) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(Acid Number Acid Number Abnormal Abnormal Abnormal Abnormal	Petro Canada L 385 Sc M	.ubricants buthdown R ississauga, CA L5J ct: Kyle Blez

Report Id: PETMIS [WCAMIS] 02630183 (Generated: 04/22/2024 14:17:47) Rev: 1

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Contact/Location: Kyle Blezard - PETMIS