

No relevant graphs to display

RECOMMENDATION	PROBLEMATIC	TEST RE	SULTS				
Resample at the next service interval to monitor.	Sample Status				ATTENTION	NORMAL	ATTENTION
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.	White Metal	scalar	Visual*	NONE	🔺 VLITE	NONE	NONE
	PrtFilter						

Customer Id: ONTKEE Sample No.: WC0686268 Lab Number: 02499223 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

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

RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Description
Information Required	MISSED	May 24 2023	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

HISTORICAL DIAGNOSIS





NORMAL

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. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) R&O OIL ISO 46. Please confirm. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

31 Aug 2020 Diag: Kevin Marson



We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.Component wear rates appear to be normal (unconfirmed). There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







Report Id: ONTKEE [WCAMIS] 02499223 (Generated: 11/27/2023 11:41:43) Rev: 1



OIL ANALYSIS REPORT

EAR FALLS GS FP1G3

Component **Thrust Bearing** Fluid ESSO TERESSO ISO 46 (--- GAL)

DIAGNOSIS

A Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

A Wear

Light concentration of visible metal present.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

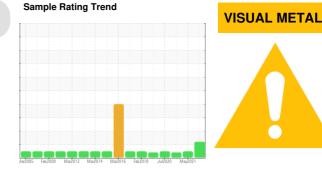
Fluid Condition

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



Particle Filter (Magn: 200 x)

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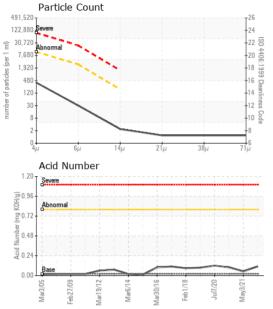
SAMPLE INFORMA	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0686268	WC0560624	WC
Sample Date		Client Info		25 Mar 2022	03 May 2021	31 Aug 2020
	hrs	Client Info		0	0	0
Ű	hrs	Client Info		0	0	0
Oil Changed	1113	Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	ATTENTION
				-	-	
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
lron 🛛	ppm	ASTM D5185(m)	>85	<1	<1	<1
Chromium p	ppm	ASTM D5185(m)		0	0	0
Nickel ß	ppm	ASTM D5185(m)		<1	0	<1
Titanium 🛛	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	<1
Aluminum p	ppm	ASTM D5185(m)	>40	<1	<1	<1
Lead p	ppm	ASTM D5185(m)	>60	0	0	0
	ppm	ASTM D5185(m)	>7	0	<1	<1
	ppm	ASTM D5185(m)	>40	0	0	0
	ppm	ASTM D5185(m)		0	0	<1
	ppm	ASTM D5185(m)		0	0	0
	ppm	ASTM D5185(m)		0	0	0
	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron p	ppm	ASTM D5185(m)	0	<1	<1	<1
				-	0	0
Barium p	ppm	ASTM D5185(m)		0	0	0
	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	0	0	0
Molybdenum			0	-		
Molybdenum p Manganese p	opm opm	ASTM D5185(m)	0	0	0	0
Molybdenum p Manganese p Magnesium p	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	0	0	0
Molybdenum p Manganese p Magnesium p Calcium p	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0	0 0 0	0 0 <1	0 0 <1
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p	opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 2.4	0 0 0 0	0 0 <1 <1	0 0 <1 <1
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 2.4	0 0 0 0 1	0 0 <1 <1 1	0 0 <1 <1 <1 <1
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p	opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 2.4	0 0 0 0 1 <1 1895	0 0 <1 <1 1 <1 1898	0 0 <1 <1 <1 <1 1 1905
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p	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)	0 0 2.4 0	0 0 0 1 <1 1895 <1	0 0 <1 <1 1 <1 1898 <1	0 0 <1 <1 <1 1 1905 <1
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p	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)	0 0 2.4 0 limit/base	0 0 0 1 <1 1895 <1 current	0 0 <1 <1 1 <1 1898 <1 history1	0 0 <1 <1 <1 <1 1 1905 <1 history2
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p	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)	0 0 2.4 0	0 0 0 1 <1 1895 <1 current <1	0 0 <1 <1 1 <1 1898 <1 history1 1	0 0 <1 <1 <1 <1 1 1905 <1 history2 <1
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p	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)	0 0 2.4 0 limit/base >20	0 0 0 1 <1 1895 <1 current <1 0	0 0 <1 <1 1 <1 1898 <1 history1 1 <1	0 0 <1 <1 <1 <1 1 1905 <1 history2 <1 0
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p	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)	0 0 2.4 0 Iimit/base >20	0 0 0 1 <1 1895 <1 current <1 0 0 0	0 0 <1 <1 1 <1 1898 <1 history1 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 <1 1 <1 1 <1 1 <1 1 <1 1 <1 1 <1 1 <1 1 <1 1 <1 <	0 0 <1 <1 <1 1 1905 <1 history2 <1 0 0
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 2.4 0 ilimit/base >20 20 ilimit/base	0 0 0 1 <1 1895 <1 : : : : : : : : : : : : : : : : : :	0 0 <1 <1 1 <1 1898 <1 history1 1 <1 <1 <1 <1 history1	0 0 <1 <1 <1 1 1905 <1
Molybdenum p Manganese p Magnesium p Calcium p Calcium p Dhosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 2.4 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 1 1 <1 1895 <1 current <1 0 0 0 current 3337	0 0 <1 <1 1 <1 1898 <1 history1 1 <1 <1 <1 <1 <1 <1 525	0 0 <1 <1 <1 1 1905 <1 history2 <1 0 0 0 history2 ∧ 16227
Molybdenum p Manganese p Magnesium p Calcium p Calcium p Dhosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 2.4 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 1 <1 1895 <1 : : : : : : : : : : : : : : : : : :	0 0 <1 <1 1 <1 1898 <1 history1 1 <1 <1 <1 <1 history1	0 0 <1 <1 <1 1 1905 <1 history2 <1 0 0 0 history2 ∧ 16227 1295
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647	0 0 2.4 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 1 1 <1 1895 <1 current <1 0 0 0 current 3337	0 0 <1 <1 1 1 <1 1898 <1 history1 1 <1 <1 <1 <1 <1 <1 <1 <1 525 150 13	0 0 <1 <1 <1 1 1905 <1 history2 <1 0 0 0 history2 1295 67
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >6µm p Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 2.4 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 1 <1 <1 1895 <1 current <1 0 0 0 current 337 27	0 0 <1 <1 1 1 <1 1898 <1 history1 1 <1 <1 <1 <1 <1 <1 <1 525 150 13 5	0 0 <1 <1 <1 1 1905 <1 • history2 <1 0 0 0 history2 × 1 6227 1295 67 18
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 2.4 0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 1 <1 1895 <1 current <1 0 0 0 current 337 27 2	0 0 <1 <1 1 1 <1 1898 <1 history1 1 <1 <1 <1 <1 <1 <1 <1 <1 525 150 13 5 0	0 0 <1 <1 <1 1 1905 <1 history2 <1 0 0 0 history2 1295 67
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm p articles >6µm p Particles >14µm p Particles >38µm p	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	0 0 2.4 0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 1 <1 <1 1895 <1 current <1 0 0 0 current 337 27 2 2 1	0 0 <1 <1 1 1 <1 1898 <1 history1 1 <1 <1 <1 <1 <1 <1 <1 525 150 13 5	0 0 <1 <1 <1 1 1905 <1 • history2 <1 0 0 0 history2 × 1 6227 1295 67 18
Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm p Particles >14µm p Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 2.4 0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 1 <1 <1 1895 <1 current <1 0 0 0 current 337 27 2 2 1 1	0 0 <1 <1 1 1 <1 1898 <1 history1 1 <1 <1 <1 <1 <1 <1 <1 <1 525 150 13 5 0	0 0 <1 <1 <1 1 1905 <1 • history2 <1 0 0 0 history2 × 16227 1295 67 18 0 0

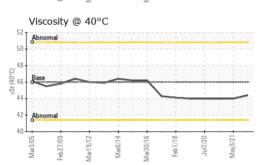
Submitted By: ?

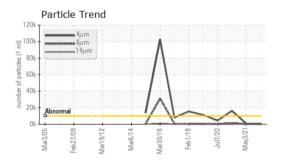
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OIL ANALYSIS REPORT





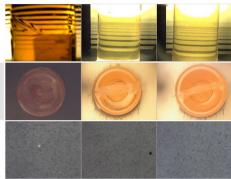


FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	0.11	0.05	0.10
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE		NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	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*	>2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERTI	ES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	44.4	44.0	44.0
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color

Bottom

PrtFilter



: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Ontario Power Generation** Laboratory CALA Sample No. : WC0686268 Received : 12 Jul 2022 Lab Number : 02499223 Diagnosed : 14 Jul 2022

KENORA PRODUCTION CENTRE, 200-60 FOURTEENTH ST N. KENORA, ON CA P9N 4M9 Contact: Josh Robinson josh.robinson@opg.com T: F:

ISO 17025:2017 Accredited Laboratory Unique Number : 5424183 Diagnostician : Kevin Marson **Test Package** : IND 2 (Additional Tests: BottomAnalysis, FilterPatch, PrtCount, TAN Man) To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.