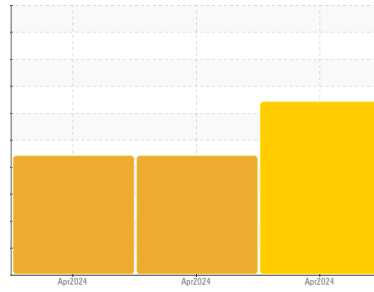




PROBLEM SUMMARY

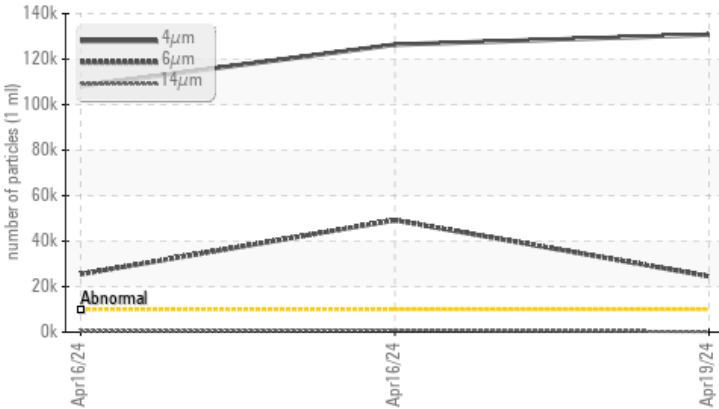
Machine Id
30TP701B
 Component
Outboard Bearing
 Fluid
 {not provided} (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



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. We advise that you check for the source of water entry. 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 advise that you follow the water drain-off procedure for this component. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	SEVERE
Particles >4µm	ASTM D7647	>10000	▲ 130762	▲ 108260	▲ 126373
Particles >6µm	ASTM D7647	>2500	▲ 24544	▲ 25452	▲ 49224
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 24/22/15	▲ 24/22/16	▲ 24/23/17
Appearance	scalar Visual*	NORML	▲ WGOIL	NORML	NORML
Free Water	scalar Visual*		▲ 1%	NEG	NEG

Customer Id: PETMIS
 Sample No.: WC
 Lab Number: 02630432
 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
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Water Drain-off	---	---	?	We advise that you follow the water drain-off procedure for this component.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Alert	---	---	?	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	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	---	---	?	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 Water Access	---	---	?	We advise that you check for the source of water entry.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

ISO



16 Apr 2024 Diag: Kevin Marson

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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report



ISO



16 Apr 2024 Diag: Wes Davis

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. We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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. 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. All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

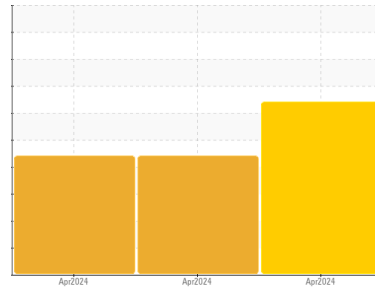
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
30TP701B
 Component
Outboard Bearing
 Fluid
{not provided} (--- 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. We advise that you check for the source of water entry. 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 advise that you follow the water drain-off procedure for this component. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your 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. Free water present.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC	WC	WC
Sample Date	Client Info	19 Apr 2024	16 Apr 2024	16 Apr 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		SEVERE	SEVERE	SEVERE

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>20	2	2	6
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	0	0	<1
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>20	2	<1	2
Tin	ppm	ASTM D5185(m)	>20	<1	1	3
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)		<1	0	0
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	<1	<1
Calcium	ppm	ASTM D5185(m)		<1	0	<1
Phosphorus	ppm	ASTM D5185(m)		<1	0	1
Zinc	ppm	ASTM D5185(m)		2	<1	1
Sulfur	ppm	ASTM D5185(m)		806	634	644
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

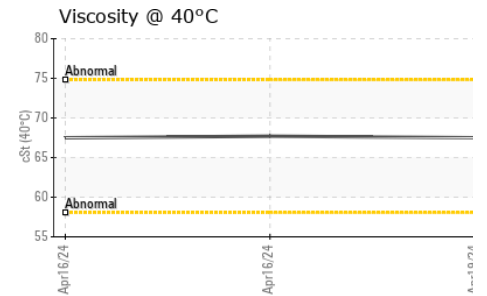
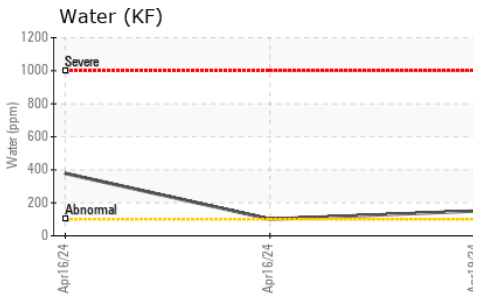
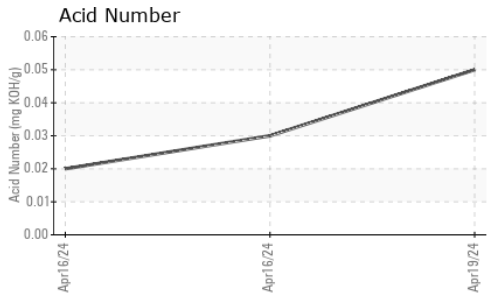
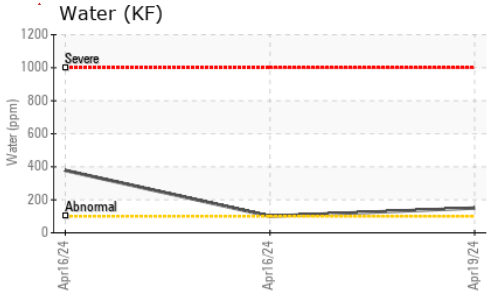
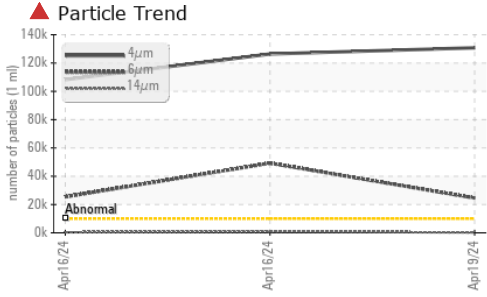
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>15	0	0	0
Sodium	ppm	ASTM D5185(m)		0	0	0
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Water	%	ASTM D6304*	>2	0.014	0.010	0.037
ppm Water	ppm	ASTM D6304*		150	101	378

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>10000	▲ 130762	▲ 108260	▲ 126373
Particles >6µm	ASTM D7647	>2500	▲ 24544	▲ 25452	▲ 49224
Particles >14µm	ASTM D7647	>160	● 210	▲ 370	▲ 855
Particles >21µm	ASTM D7647	>40	13	● 59	▲ 159
Particles >38µm	ASTM D7647	>10	0	6	12
Particles >71µm	ASTM D7647	>3	0	2	2
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 24/22/15	▲ 24/22/16	▲ 24/23/17



OIL ANALYSIS REPORT

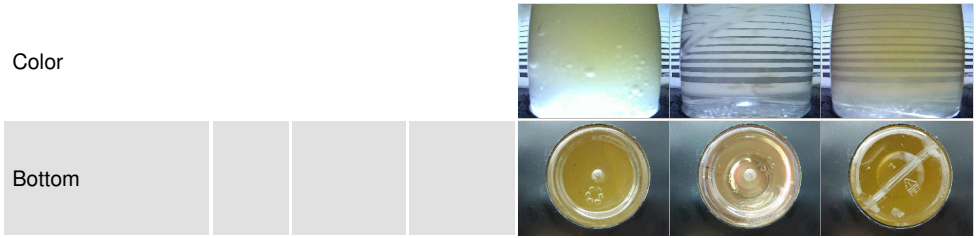


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.05	0.03	0.02

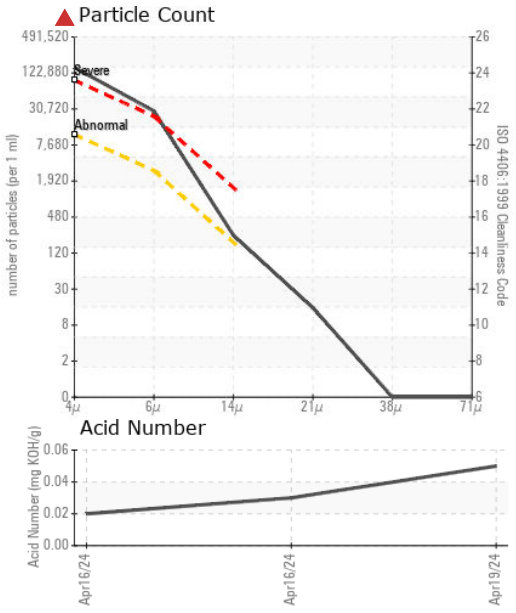
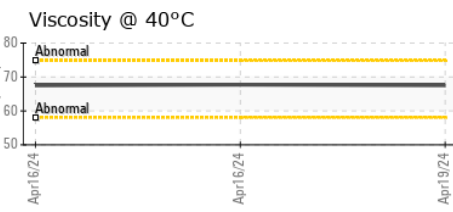
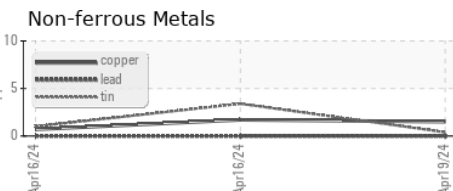
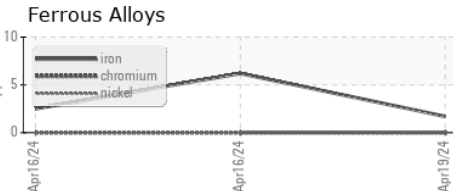
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	VLITE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	VLITE
Appearance	scalar	Visual*	NORML	WGOIL	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	.2%	.2%	.5%
Free Water	scalar	Visual*		1%	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		67.5	67.7	67.5

SAMPLE IMAGES		method	limit/base	current	history1	history2
---------------	--	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02630432
Unique Number : 5763564
Test Package : IND 2 (Additional Tests: KF, TAN Man)
Received : 19 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Kevin Marson

Petro Canada Lubricants Inc.
 385 Southdown Road
 Mississauga, ON
 CA L5J 2Y3
 Contact: Kyle Blezard
 kyle.blezard@HFSinclair.com
 T: (905)403-6768
 F: (905)822-6025

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.