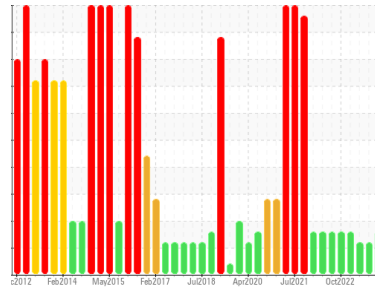




PROBLEM SUMMARY

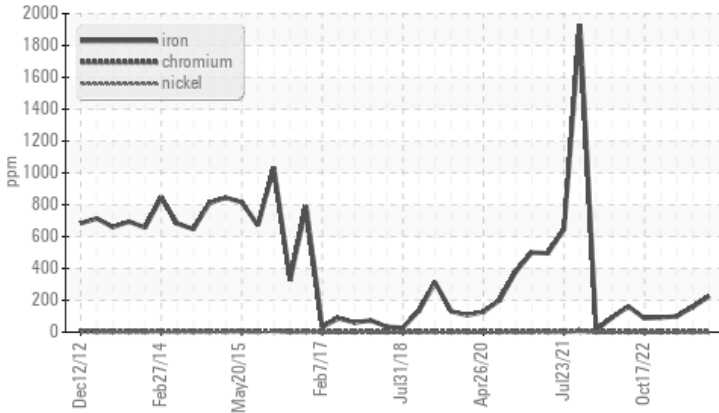
Area
CURING [23509236]
 Machine Id
N CHALLENGE TUMBLER - B27496 (S/N 0142-2)
 Component
Gearbox
 Fluid
PETRO CANADA PURITY FG EP GEAR OIL 220 (4 GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>200	▲ 225	158	99
Silt	scalar	*Visual	NONE	▲ MODER	NONE	NONE

Customer Id: OSCOSC
 Sample No.: WC0847502
 Lab Number: 05959794
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

20 Jun 2023 Diag: Angela Borella

VISUAL METAL



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample. Moderate concentration of visible metal present. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



30 Mar 2023 Diag: Angela Borella

VISUAL METAL



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample. Moderate concentration of visible metal present. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



07 Jan 2023 Diag: Don Baldrige

VISUAL METAL



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample. Moderate concentration of visible metal present. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 150 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

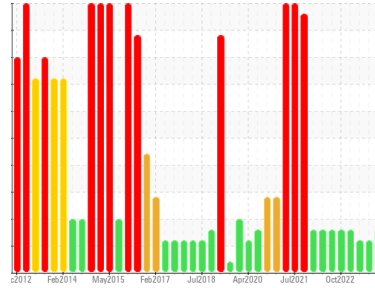
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
CURING [23509236]
 Machine Id
N CHALLENGE TUMBLER - B27496 (S/N 0142-2)
 Component
Gearbox
 Fluid
PETRO CANADA PURITY FG EP GEAR OIL 220 (4 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

Gear wear is indicated.

Contamination

There is a moderate amount of visible silt present in the sample.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0847502	WC0828368	WC0802283
Sample Date	Client Info		12 Sep 2023	20 Jun 2023	30 Mar 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
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	▲ 225	158	99
Chromium	ppm	ASTM D5185m >15	2	1	<1
Nickel	ppm	ASTM D5185m >15	2	<1	0
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	0	<1
Lead	ppm	ASTM D5185m >100	4	2	0
Copper	ppm	ASTM D5185m >200	12	8	2
Tin	ppm	ASTM D5185m >25	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<1	0	<1
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	<1	<1	0
Manganese	ppm	ASTM D5185m	2	1	<1
Magnesium	ppm	ASTM D5185m	0	<1	<1
Calcium	ppm	ASTM D5185m	3	5	3
Phosphorus	ppm	ASTM D5185m	152	141	111
Zinc	ppm	ASTM D5185m	2	2	2
Sulfur	ppm	ASTM D5185m	879	827	1180

CONTAMINANTS

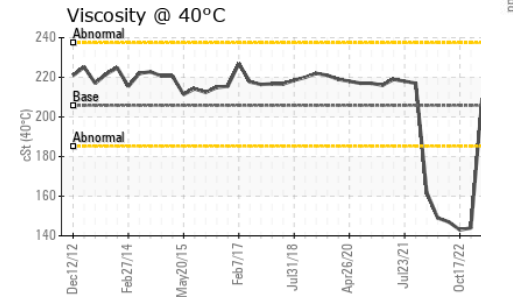
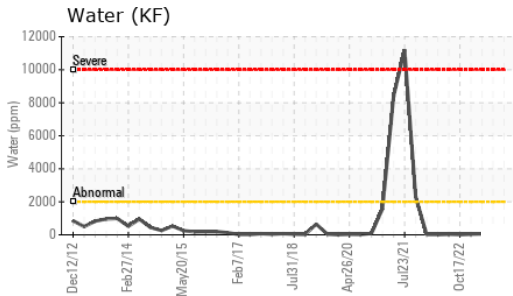
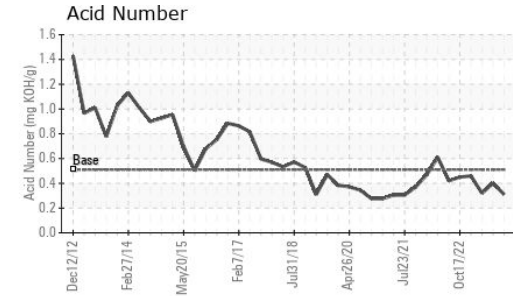
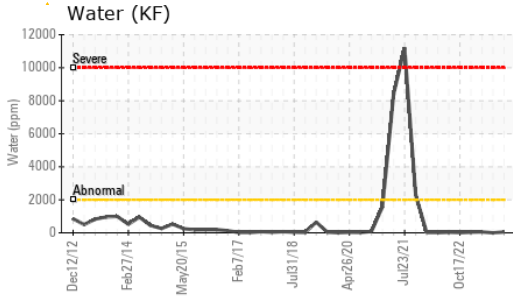
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	8	6	6
Sodium	ppm	ASTM D5185m	0	0	0
Potassium	ppm	ASTM D5185m >20	2	1	0
Water	%	ASTM D6304 >0.2	0.004	0.00	0.005
ppm Water	ppm	ASTM D6304 >2000	49.6	0.00	55.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.51	0.31	0.40	0.32



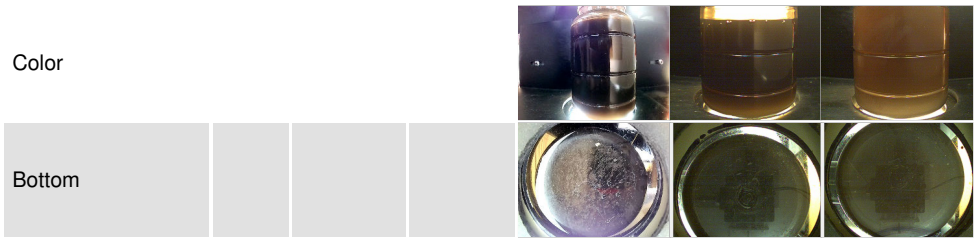
OIL ANALYSIS REPORT



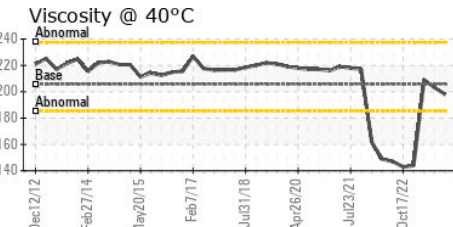
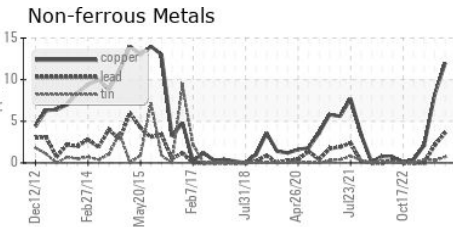
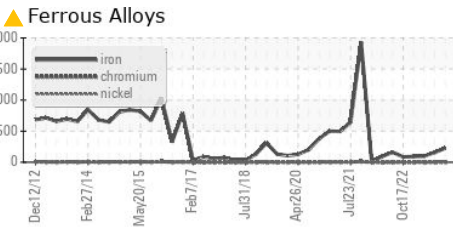
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ MODER	▲ HEAVY
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	▲ MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	205.8	198	203

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0847502 **Received** : 25 Sep 2023
Lab Number : 05959794 **Diagnosed** : 27 Sep 2023
Unique Number : 10661007 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

OSCEOLA FOODS (HORMEL)
 1027 WARREN AVE
 OSCEOLA, IA
 US 50213
 Contact: WADE MYERS
 wlmymers@hormel.com
 T: (641)342-8043
 F: (641)342-8047

Certificate L2367
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)