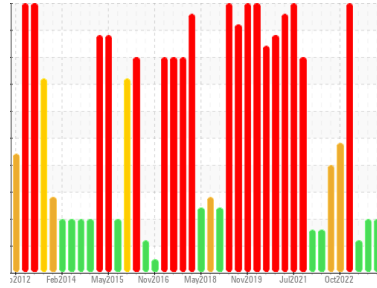




PROBLEM SUMMARY

Area
TUMBLE [23509235]
 Machine Id
S CHALLENGE TUMBLER - B26846 (S/N K4950)
 Component
Gearbox
 Fluid
PETRO CANADA PURITY FG EP GEAR OIL 220 (4 GAL)

Sample Rating Trend

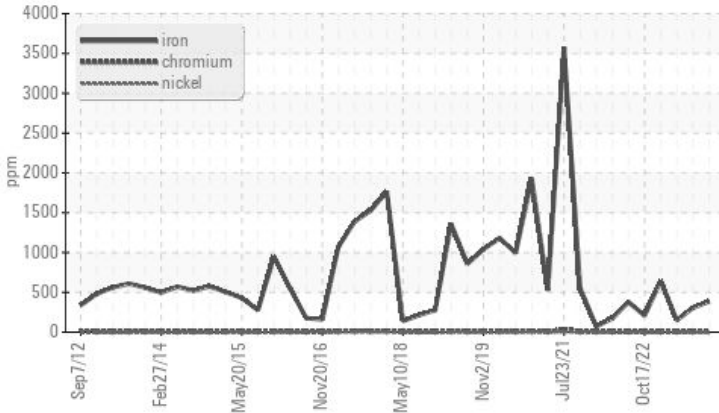


VISUAL METAL



COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to metal particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>200	▲ 386	▲ 305	150
White Metal	scalar	*Visual	NONE	▲ HEAVY	▲ HEAVY	▲ HEAVY

Customer Id: OSCOSC
 Sample No.: WC0847501
 Lab Number: 05959795
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	We were unable to perform a particle count due to metal particles present in this sample.

HISTORICAL DIAGNOSIS

19 Jun 2023 Diag: Angela Borella

VISUAL METAL



No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. High concentration of visible metal present. All other 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 suitable for further service.

view report



30 Mar 2023 Diag: Angela Borella

VISUAL METAL



No corrective action is recommended at this time. Resample at the next service interval to monitor. High 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 suitable for further service.

view report



07 Jan 2023 Diag: Don Baldrige

WEAR



We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. 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. Moderate concentration of visible metal present. Gear wear is indicated. Appearance is milky. Moderate concentration of visible dirt/debris present in the oil. There is a very high concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

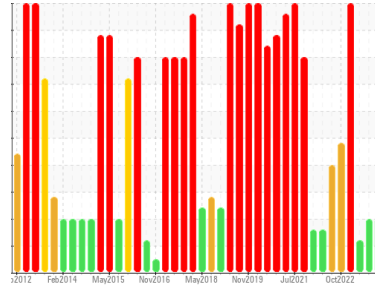
view report





OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Area
TUMBLE [23509235]
 Machine Id
S CHALLENGE TUMBLER - B26846 (S/N K4950)
 Component
Gearbox
 Fluid
PETRO CANADA PURITY FG EP GEAR OIL 220 (4 GAL)

DIAGNOSIS

Recommendation

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to metal particles present in this sample.

Wear

High concentration of visible metal present. Gear wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0847501	WC0828366	WC0802282
Sample Date	Client Info	12 Sep 2023	19 Jun 2023	30 Mar 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	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	▲ 386	▲ 305	150
Chromium ppm	ASTM D5185m >15	3	2	1
Nickel ppm	ASTM D5185m >15	1	<1	0
Titanium ppm	ASTM D5185m	<1	<1	<1
Silver ppm	ASTM D5185m	0	0	0
Aluminum ppm	ASTM D5185m >25	2	<1	2
Lead ppm	ASTM D5185m >100	<1	0	0
Copper ppm	ASTM D5185m >200	3	2	1
Tin ppm	ASTM D5185m >25	0	0	0
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	0	0	0
Barium ppm	ASTM D5185m	0	0	0
Molybdenum ppm	ASTM D5185m	2	1	<1
Manganese ppm	ASTM D5185m	3	2	2
Magnesium ppm	ASTM D5185m	0	1	<1
Calcium ppm	ASTM D5185m	3	7	7
Phosphorus ppm	ASTM D5185m	148	140	156
Zinc ppm	ASTM D5185m	34	32	27
Sulfur ppm	ASTM D5185m	962	898	968

CONTAMINANTS

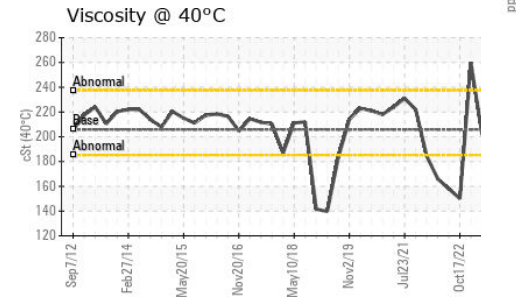
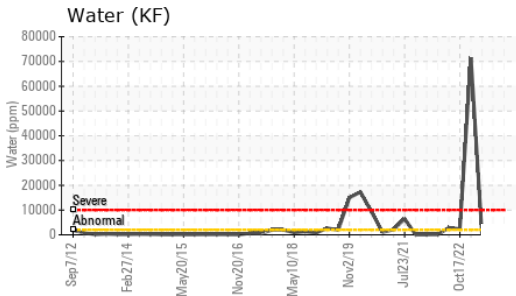
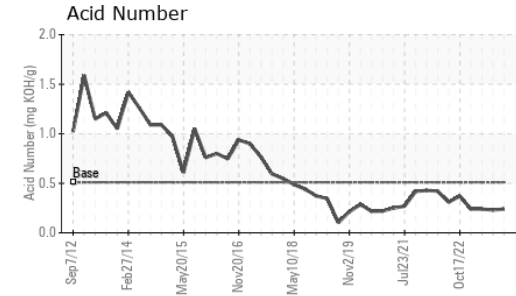
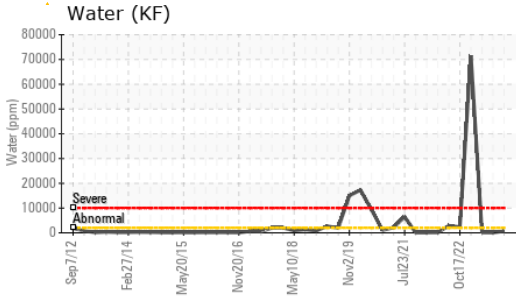
method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >50	12	11	8
Sodium ppm	ASTM D5185m	7	5	5
Potassium ppm	ASTM D5185m >20	2	2	0
Water %	ASTM D6304 >0.2	0.066	0.009	0.011
ppm Water	ASTM D6304 >2000	668.7	92.8	118.8

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045 0.51	0.24	0.23	0.24



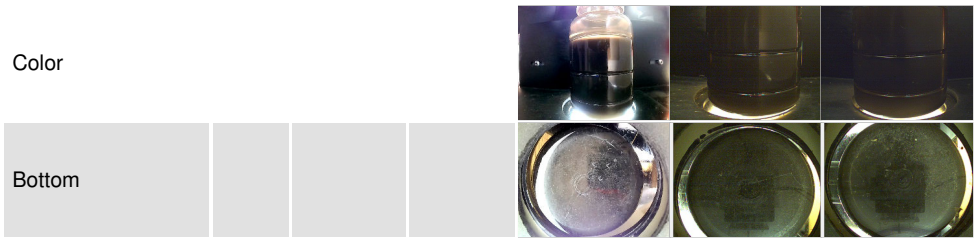
OIL ANALYSIS REPORT



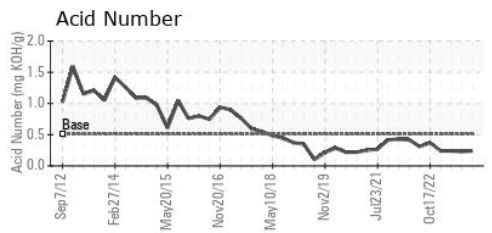
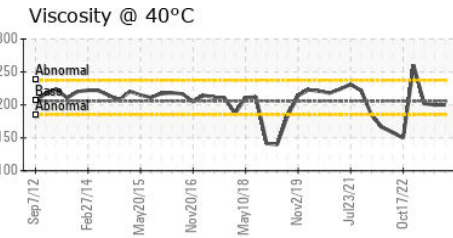
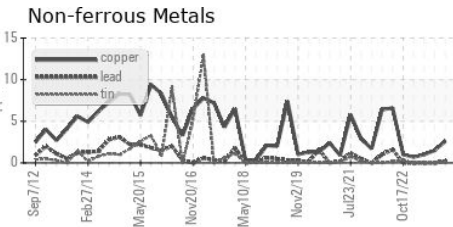
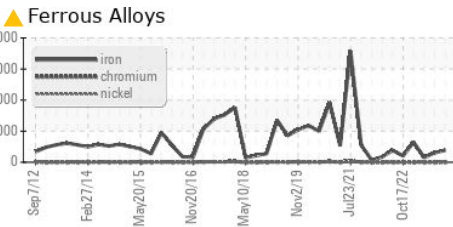
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ HEAVY	▲ HEAVY
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	205.8	200	202

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0847501 **Received** : 25 Sep 2023
Lab Number : 05959795 **Diagnosed** : 26 Sep 2023
Unique Number : 10661008 **Diagnostician** : Don Baldrige
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

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)