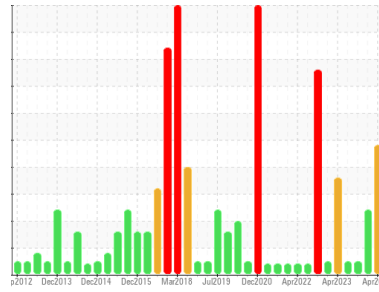




PROBLEM SUMMARY

Area
TUMBLE
 Machine Id
B37183 - W AMFEC HYD RES (S/N 960787)
 Component
Hydraulic System
 Fluid
PETRO CANADA PURITY FG AW HYDRAULIC 46 (175 GAL)

Sample Rating Trend

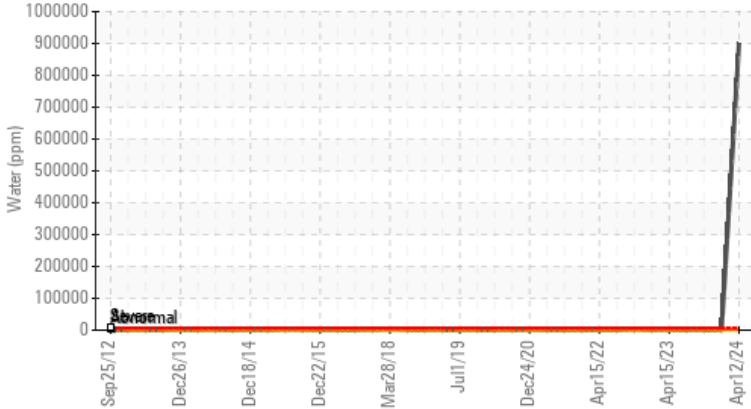


WATER



COMPONENT CONDITION SUMMARY

▲ Water (KF)



RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform a all tests.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	NORMAL
Water	%	ASTM D6304	>0.05	▲ 90.0	▲ 0.118	0.002
ppm Water	ppm	ASTM D6304	>500	▲ 900000	▲ 1180	20.1

Customer Id: OSCOSC
 Sample No.: WC0914015
 Lab Number: 06155018
 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 Fluid	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	Please note that there was too much water present in the oil to perform a viscosity test.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

WATER



11 Oct 2023 Diag: Jonathan Hester

We advise that you check for the source of water entry. We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. Appearance is hazy. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



NORMAL



16 Jul 2023 Diag: Wes Davis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. 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



NORMAL



26 Apr 2023 Diag: Angela Borella

Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

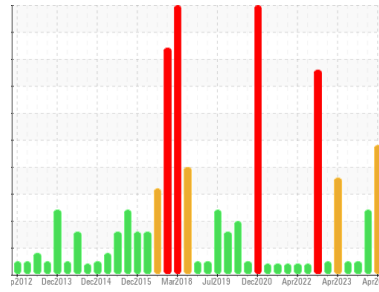
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
TUMBLE
Machine Id
B37183 - W AMFEC HYD RES (S/N 960787)
Component
Hydraulic System
Fluid
PETRO CANADA PURITY FG AW HYDRAULIC 46 (175 GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check for the source of water entry. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform a all tests.

Wear

All component wear rates are normal.

▲ Contamination

Sample consists almost entirely of free water. There is a high concentration of water present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0914015	WC0856687	WC0828356
Sample Date	Client Info		12 Apr 2024	11 Oct 2023	16 Jul 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			SEVERE	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	2	2	2
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	0	<1	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	0	0	0
Lead	ppm	ASTM D5185m >20	0	0	0
Copper	ppm	ASTM D5185m >20	0	0	<1
Tin	ppm	ASTM D5185m >20	0	<1	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	2
Molybdenum	ppm	ASTM D5185m	1	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m	0	2	0
Calcium	ppm	ASTM D5185m	1	2	0
Phosphorus	ppm	ASTM D5185m	441	446	558
Zinc	ppm	ASTM D5185m	6	2	5
Sulfur	ppm	ASTM D5185m	615	524	650

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	3	2	4
Sodium	ppm	ASTM D5185m	<1	6	<1
Potassium	ppm	ASTM D5185m >20	0	2	0
Water	%	ASTM D6304 >0.05	▲ 90.0	▲ 0.118	0.002
ppm Water	ppm	ASTM D6304 >500	▲ 900000	▲ 1180	20.1

FLUID CLEANLINESS

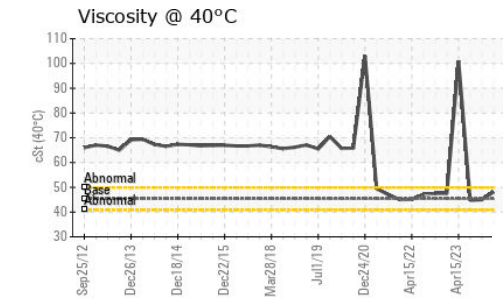
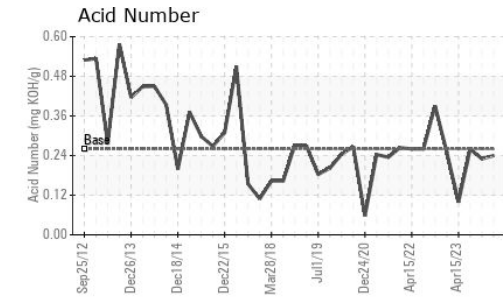
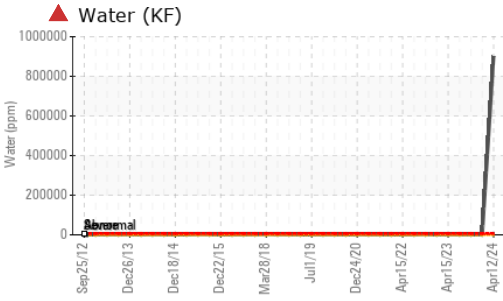
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	---	1800	1121
Particles >6µm	ASTM D7647	>1300	---	304	209
Particles >14µm	ASTM D7647	>160	---	12	16
Particles >21µm	ASTM D7647	>40	---	2	5
Particles >38µm	ASTM D7647	>10	---	1	0
Particles >71µm	ASTM D7647	>3	---	1	0
Oil Cleanliness	ISO 4406 (c)	>20/17/14	---	18/15/11	17/15/11

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.26	---	0.24	0.23



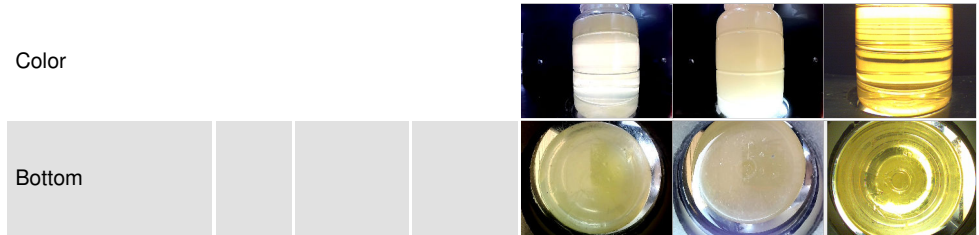
OIL ANALYSIS REPORT



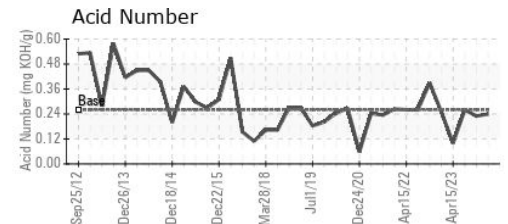
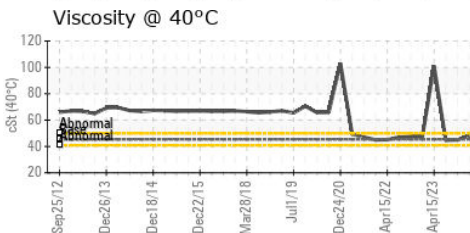
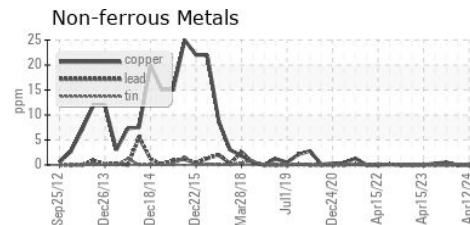
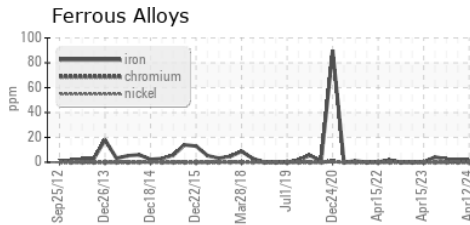
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	NEG	0.2%	NEG
Free Water	scalar	*Visual	>10%	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	45.36	---	48.1	45.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0914015 **Received** : 19 Apr 2024
Lab Number : 06155018 **Tested** : 24 Apr 2024
Unique Number : 10990441 **Diagnosed** : 24 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF)

OSCEOLA FOODS (HORMEL)
 1027 WARREN AVE
 OSCEOLA, IA
 US 50213
 Contact: WADE MYERS
 wlmyers@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)