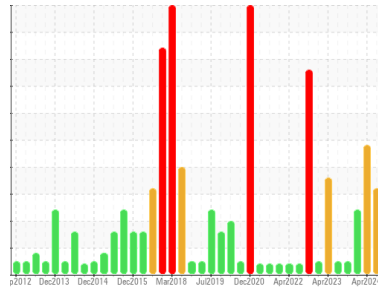




OIL ANALYSIS REPORT

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 you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Appearance is hazy. There is a light concentration of water present in the oil. 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		WC0947163	WC0914015	WC0856687
Sample Date	Client Info		10 Jul 2024	12 Apr 2024	11 Oct 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	N/A	N/A
Sample Status			ABNORMAL	SEVERE	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<1	2	2
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	<1	0	0
Lead	ppm	ASTM D5185m >20	0	0	0
Copper	ppm	ASTM D5185m >20	0	0	0
Tin	ppm	ASTM D5185m >20	0	0	<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	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	1	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m	0	0	2
Calcium	ppm	ASTM D5185m	0	1	2
Phosphorus	ppm	ASTM D5185m	420	441	446
Zinc	ppm	ASTM D5185m	0	6	2
Sulfur	ppm	ASTM D5185m	571	615	524

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	2	3	2
Sodium	ppm	ASTM D5185m	1	<1	6
Potassium	ppm	ASTM D5185m >20	0	0	2
Water	%	ASTM D6304 >0.05	▲ 0.272	▲ 90.0	▲ 0.118
ppm Water	ppm	ASTM D6304 >500	▲ 2720	▲ 900000	▲ 1180

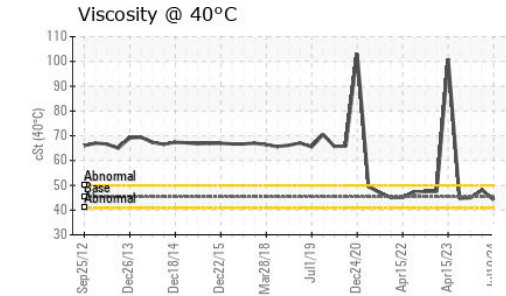
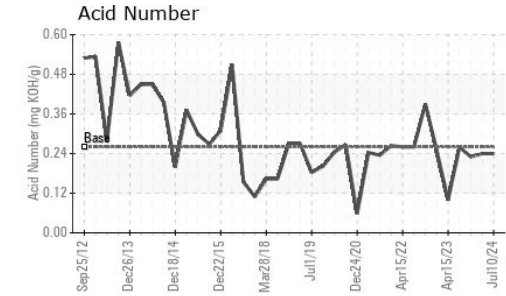
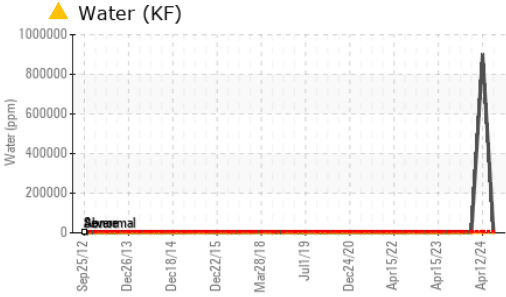
FLUID CLEANLINESS

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

FLUID DEGRADATION

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

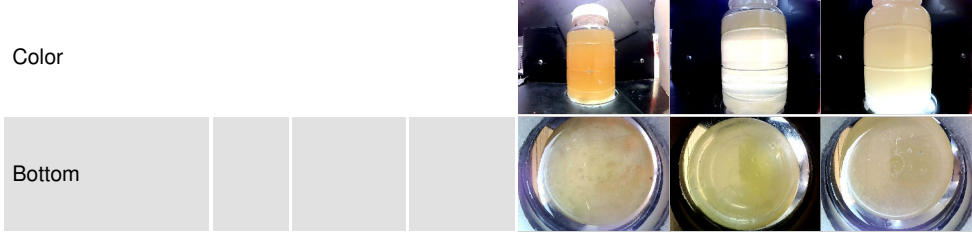
OIL ANALYSIS REPORT



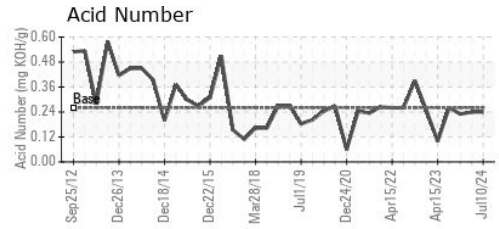
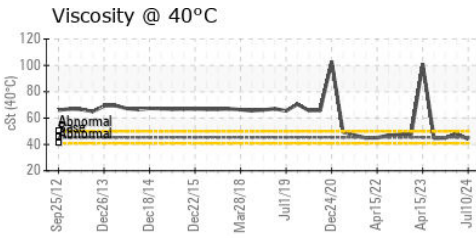
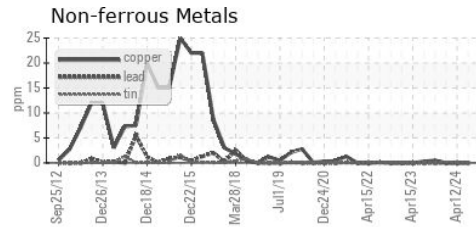
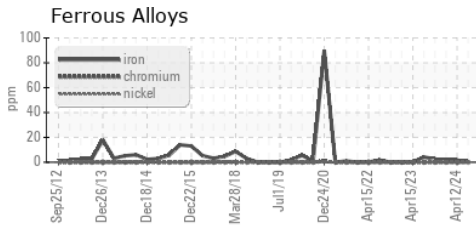
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● MILKY	● HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	▲ 0.2%
Free Water	scalar	*Visual		● >10%	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.36	44.1	---

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. : WC0947163 **Received** : 17 Jul 2024
Lab Number : 06239140 **Tested** : 19 Jul 2024
Unique Number : 11127974 **Diagnosed** : 19 Jul 2024 - Don Baldrige
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)