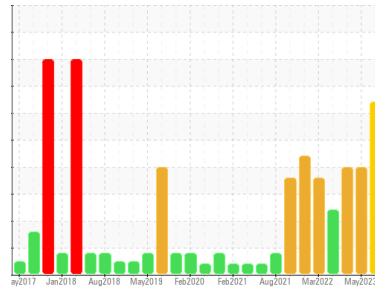




PROBLEM SUMMARY

Sample Rating Trend

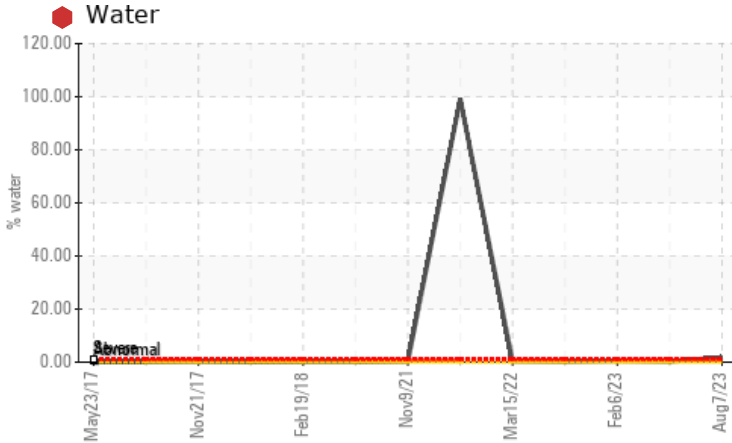


WATER



Machine Id
B42219 - CARRUTTERS PALLET LIFT
 Component
Hydraulic System
 Fluid
PETRO CANADA PURITY FG AW HYDRAULIC 46 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. 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				SEVERE	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.1	🔴 1.75	🟡 0.289	🟡 0.507
ppm Water	ppm	ASTM D6304	>1000	🔴 17500	🟡 2890	🟡 5070
Silt	scalar	*Visual	NONE	🟡 MODER	NONE	NONE
Appearance	scalar	*Visual	NORML	🟡 HAZY	🟡 HAZY	🟡 HAZY
Emulsified Water	scalar	*Visual	>0.1	🔴 0.2%	0.2%	🟡 0.2%
Free Water	scalar	*Visual		🟡 1.0	🟡 1.0	🟡 1.0

Customer Id: ROCROCUS
 Sample No.: WC0820517
 Lab Number: 05926076
 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
Water Drain-off	---	---	?	We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid.
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.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

09 May 2023 Diag: Jonathan Hester

WATER



We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. Appearance is hazy. Free water present. 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.

view report



06 Feb 2023 Diag: Don Baldrige

WATER



We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count. All component wear rates are normal. Appearance is hazy. There is a moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid.

view report



07 Nov 2022 Diag: Doug Bogart

WATER



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. All component wear rates are normal. Appearance is hazy. There is a moderate 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.

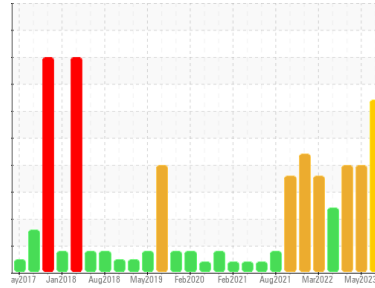
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
B42219 - CARRUTTERS PALLET LIFT

Component
Hydraulic System

Fluid
PETRO CANADA PURITY FG AW HYDRAULIC 46 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. 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

All component wear rates are normal.

Contamination

Appearance is hazy. There is a moderate amount of visible silt present in the sample. There is a high concentration of water 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		WC0820517	WC0799661	WC0765538
Sample Date	Client Info		07 Aug 2023	09 May 2023	06 Feb 2023
Machine Age	mths	Client Info	0	0	0
Oil Age	mths	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<1	0	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >10	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >10	0	0	0
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >75	0	0	0
Tin	ppm	ASTM D5185m >10	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	<1	0	1
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	<1	<1	<1
Calcium	ppm	ASTM D5185m	<1	0	4
Phosphorus	ppm	ASTM D5185m	459	467	414
Zinc	ppm	ASTM D5185m	2	0	1
Sulfur	ppm	ASTM D5185m	574	641	486

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	3	2	2
Sodium	ppm	ASTM D5185m	0	<1	0
Potassium	ppm	ASTM D5185m >20	<1	0	<1
Water	%	ASTM D6304 >0.1	1.75	0.289	0.507
ppm Water	ppm	ASTM D6304 >1000	17500	2890	5070

FLUID CLEANLINESS

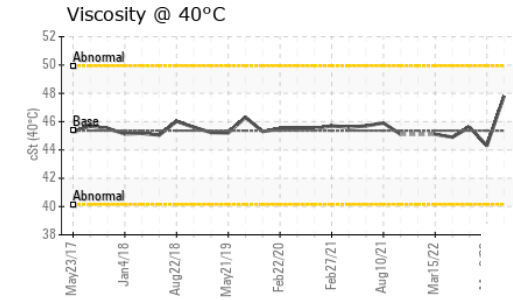
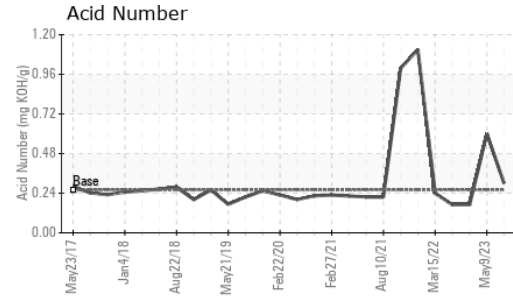
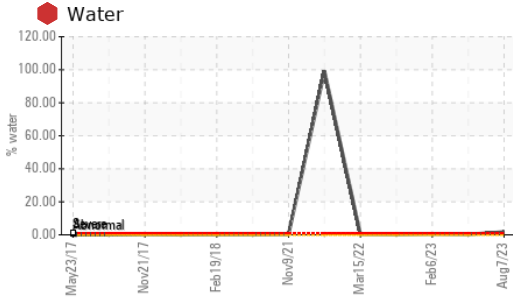
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	---	583	---
Particles >6µm	ASTM D7647	>1300	---	318	---
Particles >14µm	ASTM D7647	>160	---	54	---
Particles >21µm	ASTM D7647	>40	---	18	---
Particles >38µm	ASTM D7647	>10	---	3	---
Particles >71µm	ASTM D7647	>3	---	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	---	16/15/13	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.26	0.30	0.60	0.17



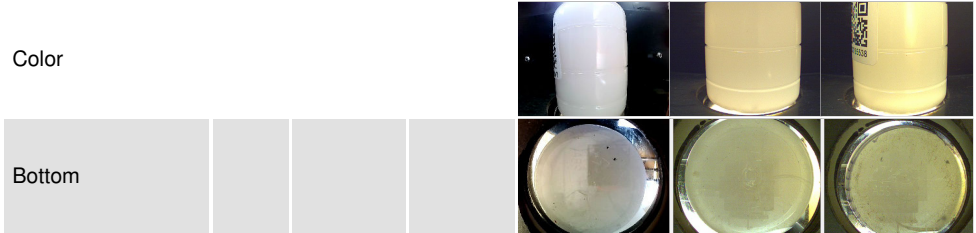
OIL ANALYSIS REPORT



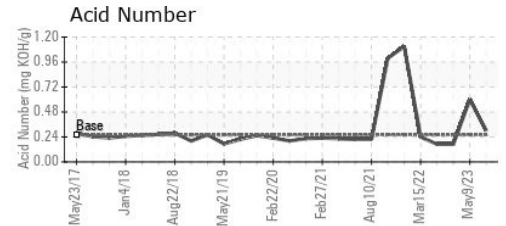
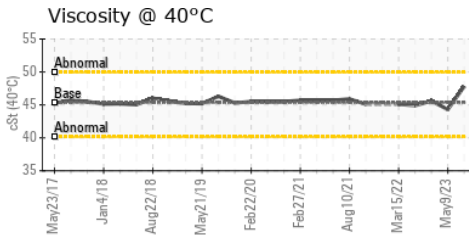
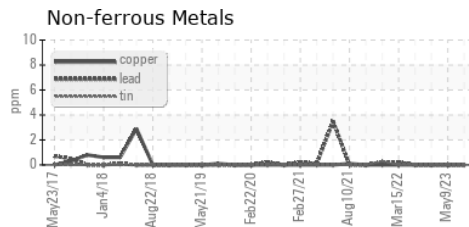
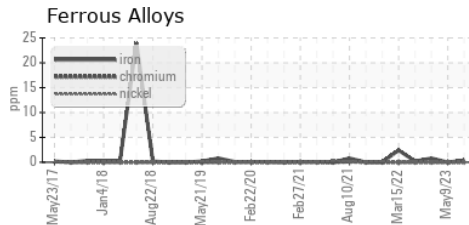
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	▲ MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	▲ HAZY	▲ HAZY	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	0.2%	▲ 0.2%
Free Water	scalar	*Visual	▲ 1.0	▲ 1.0	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.36	47.8	44.3

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. : WC0820517 **Received** : 16 Aug 2023
Lab Number : 05926076 **Diagnosed** : 17 Aug 2023
Unique Number : 10606023 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF)

Rochelle Foods - PRE
 1001 South Main, P.O. Box 45
 Rochelle, IL
 US 61068
 Contact: KEVIN STINNETT
 klistinnett@hormel.com

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)

T: (815)562-4147