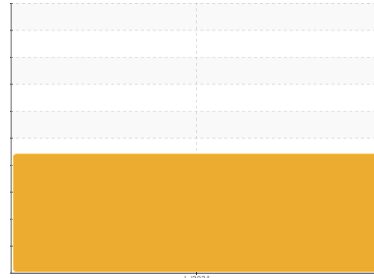




PROBLEM SUMMARY

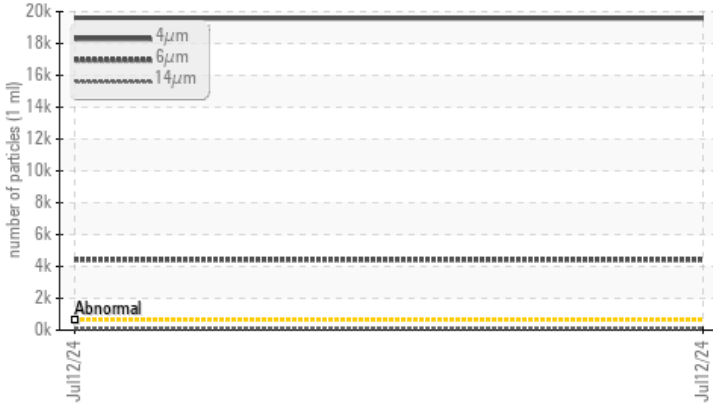
Area
PRE
 Machine Id
FCDC 1
 Component
Hydraulic System
 Fluid
PETRO CANADA PURITY FG SYNTH EP GEAR FLUID 460 (4 GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	---	---
Particles >4µm	ASTM D7647	>640	▲ 19585	---	---
Particles >6µm	ASTM D7647	>160	▲ 4424	---	---
Particles >14µm	ASTM D7647	>20	▲ 105	---	---
Particles >21µm	ASTM D7647	>4	▲ 12	---	---
Oil Cleanliness	ISO 4406 (c)	>16/14/11	▲ 21/19/14	---	---

Customer Id: BLURICIN
 Sample No.: WC0965383
 Lab Number: 06239133
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

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

RECOMMENDED ACTIONS

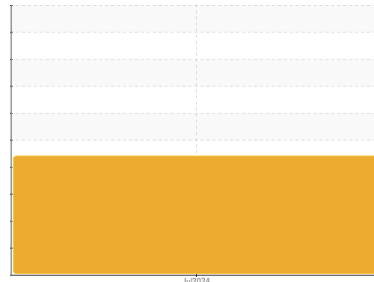
Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
PRE
 Machine Id
FCDC 1
 Component
Hydraulic System
 Fluid

PETRO CANADA PURITY FG SYNTH EP GEAR FLUID 460 (4 GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0965383	---	---
Sample Date	Client Info	12 Jul 2024	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		SEVERE	---	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	19	---	---
Iron	ppm ASTM D5185m >20	<1	---	---
Chromium	ppm ASTM D5185m >20	0	---	---
Nickel	ppm ASTM D5185m >20	0	---	---
Titanium	ppm ASTM D5185m	0	---	---
Silver	ppm ASTM D5185m	0	---	---
Aluminum	ppm ASTM D5185m >20	0	---	---
Lead	ppm ASTM D5185m >20	0	---	---
Copper	ppm ASTM D5185m >20	5	---	---
Tin	ppm ASTM D5185m >20	<1	---	---
Vanadium	ppm ASTM D5185m	0	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	0	---	---
Barium	ppm ASTM D5185m	0	---	---
Molybdenum	ppm ASTM D5185m	0	---	---
Manganese	ppm ASTM D5185m	0	---	---
Magnesium	ppm ASTM D5185m 0	<1	---	---
Calcium	ppm ASTM D5185m 0	5	---	---
Phosphorus	ppm ASTM D5185m 600	505	---	---
Zinc	ppm ASTM D5185m 0	0	---	---
Sulfur	ppm ASTM D5185m 500	630	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	<1	---	---
Sodium	ppm ASTM D5185m	<1	---	---
Potassium	ppm ASTM D5185m >20	0	---	---
Water	% ASTM D6304 >0.05	0.010	---	---
ppm Water	ppm ASTM D6304 >500	109	---	---

FLUID CLEANLINESS

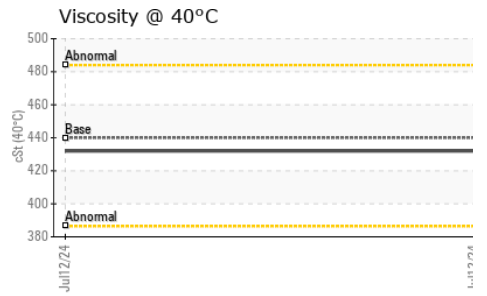
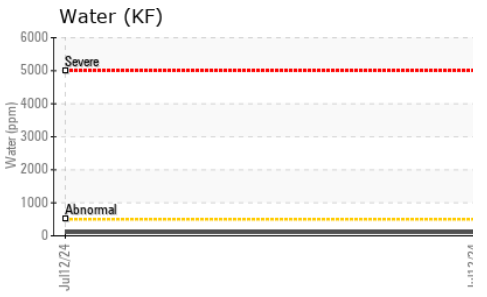
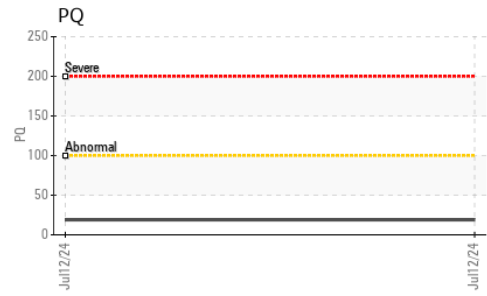
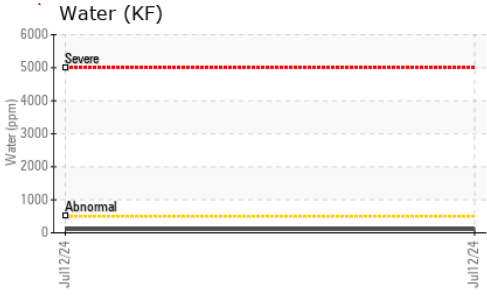
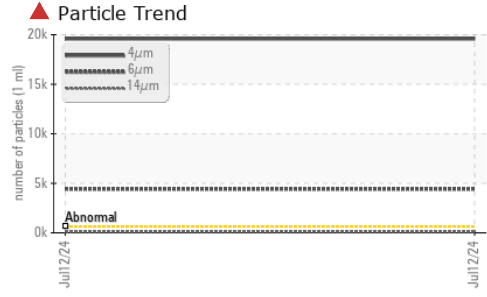
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >640	▲ 19585	---	---
Particles >6µm	ASTM D7647 >160	▲ 4424	---	---
Particles >14µm	ASTM D7647 >20	▲ 105	---	---
Particles >21µm	ASTM D7647 >4	▲ 12	---	---
Particles >38µm	ASTM D7647 >3	1	---	---
Particles >71µm	ASTM D7647 >3	1	---	---
Oil Cleanliness	ISO 4406 (c) >16/14/11	▲ 21/19/14	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	0.45	---	---



OIL ANALYSIS REPORT



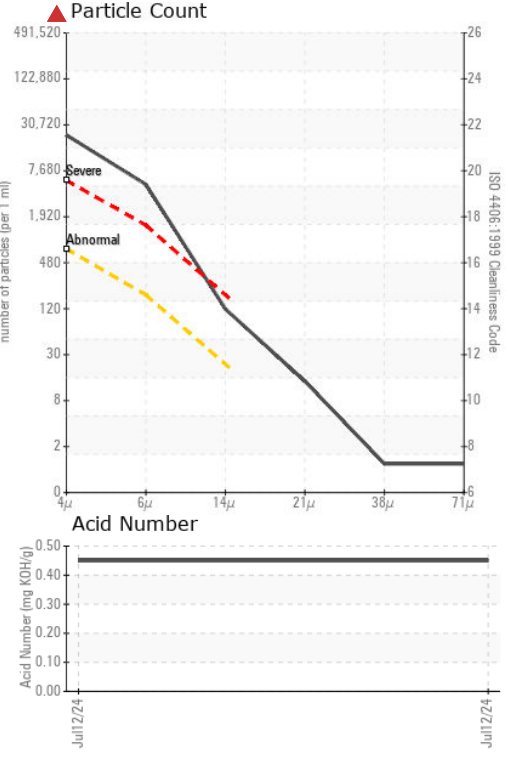
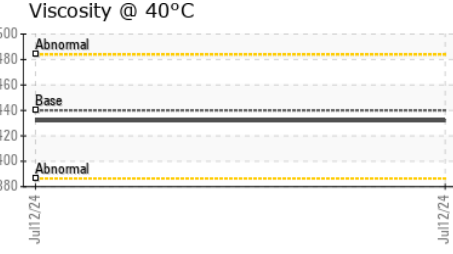
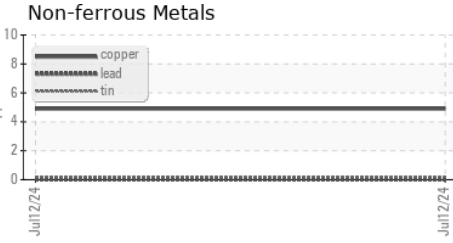
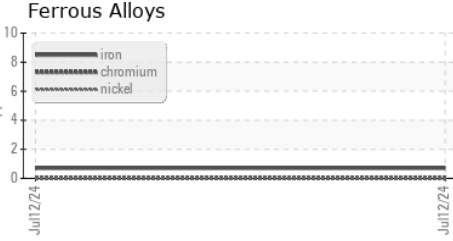
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	440	432	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color		no image	no image
Bottom		no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0965383
Lab Number : 06239133
Unique Number : 11127967
Test Package : PLANT
Received : 17 Jul 2024
Tested : 19 Jul 2024
Diagnosed : 19 Jul 2024 - Wes Davis

BLUE BUFFALO
 4748 WEST INDUSTRIES ROAD
 RICHMOND, IN
 US 47374
 Contact: KEVIN KEITH
 kkeith@bluebuff.com
 T: (765)200-6535
 F:

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)