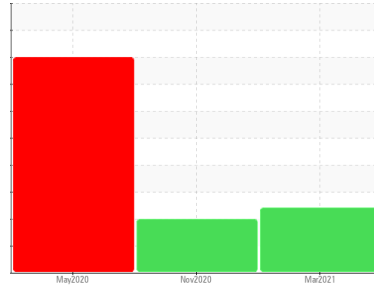




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
REF
 Machine Id
A41P98
 Component
Hydraulic System
 Fluid
PETRO CANADA PURITY FG HYDRAULIC AW 68 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

The iron level has decreased, but is still abnormal. All other component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

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	WC0554650	WC0505364	WC0438623
Sample Date	Client Info	05 Mar 2021	06 Nov 2020	01 May 2020
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	SEVERE

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.05	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	▲ 28	▲ 49	■ 78
Chromium	ppm ASTM D5185m >20	0	0	<1
Nickel	ppm ASTM D5185m >20	0	<1	0
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	0	0	<1
Aluminum	ppm ASTM D5185m >20	0	0	<1
Lead	ppm ASTM D5185m >20	1	0	<1
Copper	ppm ASTM D5185m >20	<1	1	2
Tin	ppm ASTM D5185m >20	0	0	0
Antimony	ppm ASTM D5185m	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	<1	<1	1
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	0	0	0
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m	0	0	<1
Calcium	ppm ASTM D5185m	0	0	0
Phosphorus	ppm ASTM D5185m	420	398	381
Zinc	ppm ASTM D5185m	22	0	0
Sulfur	ppm ASTM D5185m	505	410	473

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	1	2	3
Sodium	ppm ASTM D5185m	<1	<1	0
Potassium	ppm ASTM D5185m >20	0	0	0

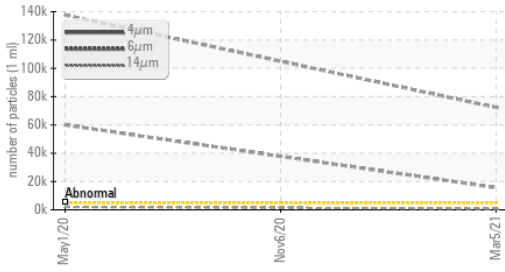
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 72340	---	▲ 137608
Particles >6µm	ASTM D7647 >1300	▲ 15614	---	▲ 59943
Particles >14µm	ASTM D7647 >160	▲ 659	---	▲ 1998
Particles >21µm	ASTM D7647 >40	▲ 111	---	▲ 438
Particles >38µm	ASTM D7647 >10	3	---	▲ 28
Particles >71µm	ASTM D7647 >3	0	---	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 23/21/17	---	▲ 24/23/18

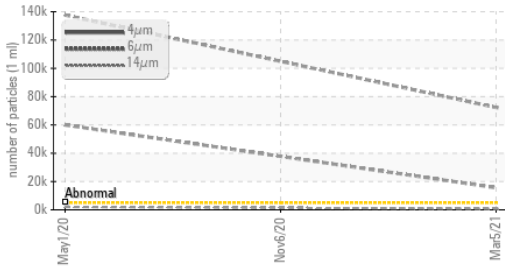


OIL ANALYSIS REPORT

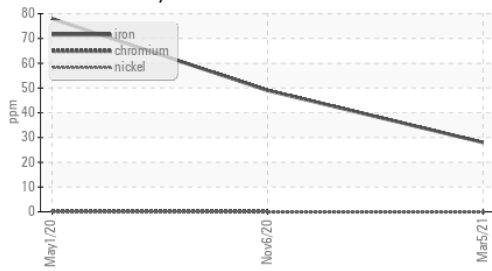
Particle Trend



Particle Trend



Ferrous Alloys

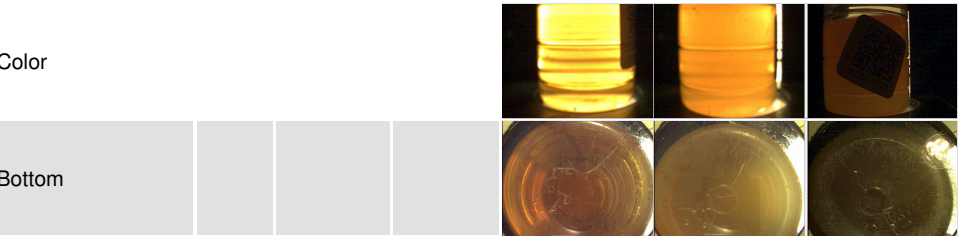


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	0.196	0.188	0.161

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

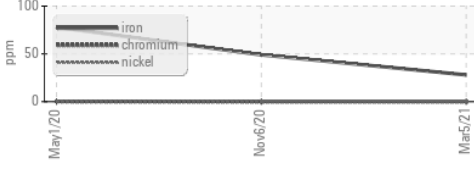
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	63.34	66.4	66.6	63.3

SAMPLE IMAGES

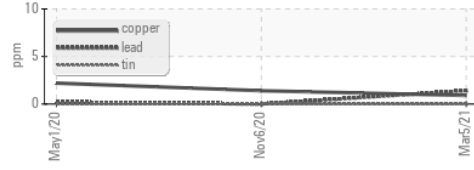


GRAPHS

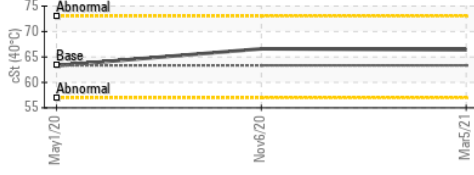
Ferrous Alloys



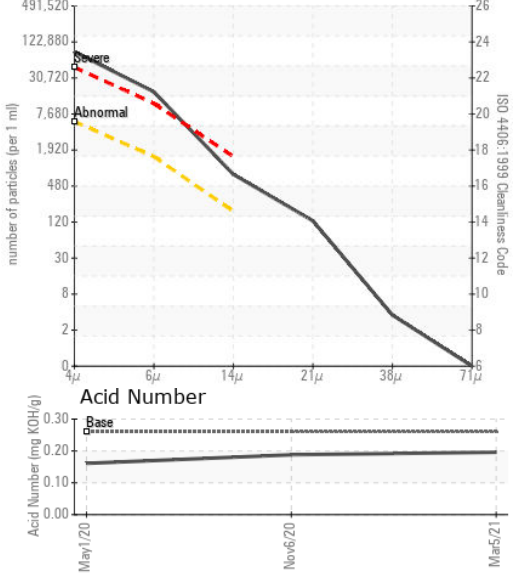
Non-ferrous Metals



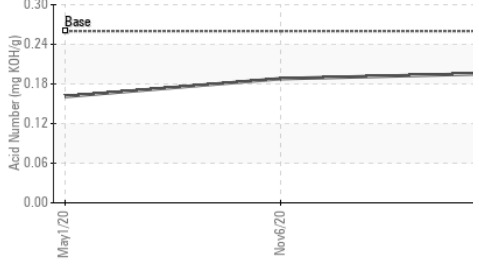
Viscosity @ 40°C



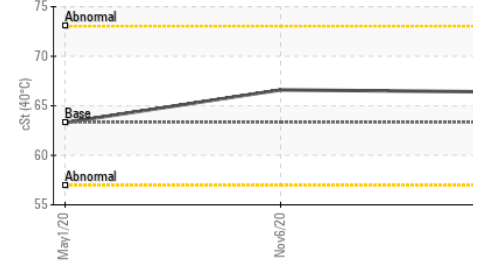
Particle Count



Acid Number



Viscosity @ 40°C



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0554650 **Received** : 11 Mar 2021
Lab Number : 05201360 **Diagnosed** : 12 Mar 2021
Unique Number : 9396671 **Diagnostician** : Don Baldrige
Test Package : IND 2

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Certificate L2367
 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)