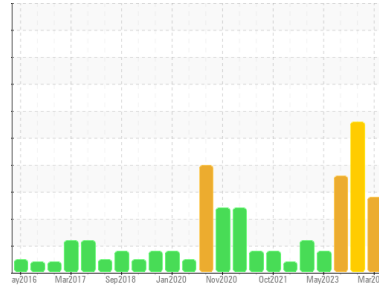




OIL ANALYSIS REPORT

Sample Rating Trend



CONTAMINANT



Area
COOK ROOM 1
 Machine Id
B53370 SURGE HOPPER COOK ROOM 1 (S/N 800938598600)
 Component
Gearbox
 Fluid
PETRO CANADA PURITY FG EP GEAR OIL 220 (23 LTR)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

Appearance is hazy. 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		WC0842530	WC0872405	WC12329357
Sample Date	Client Info		19 Mar 2024	25 Dec 2023	23 Aug 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			ABNORMAL	SEVERE	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	111	38	14
Chromium	ppm	ASTM D5185m	>15	1	<1	<1
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	1
Aluminum	ppm	ASTM D5185m	>25	0	2	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	0	0	<1
Tin	ppm	ASTM D5185m	>25	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		2	0	<1
Magnesium	ppm	ASTM D5185m		<1	0	<1
Calcium	ppm	ASTM D5185m		3	<1	2
Phosphorus	ppm	ASTM D5185m		356	332	320
Zinc	ppm	ASTM D5185m		1	0	12
Sulfur	ppm	ASTM D5185m		1287	1346	1061

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	3	1	2
Sodium	ppm	ASTM D5185m		4	0	3
Potassium	ppm	ASTM D5185m	>20	0	1	1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>40000	▲ 226308	▲ 306222	▲ 166910
Particles >6µm	ASTM D7647	>5000	▲ 152392	▲ 150470	▲ 62834
Particles >14µm	ASTM D7647	>640	▲ 6020	▲ 5948	▲ 1500
Particles >21µm	ASTM D7647	>160	▲ 183	▲ 616	98
Particles >38µm	ASTM D7647	>40	0	3	1
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>22/19/16	▲ 25/24/20	▲ 25/24/20	▲ 25/23/18

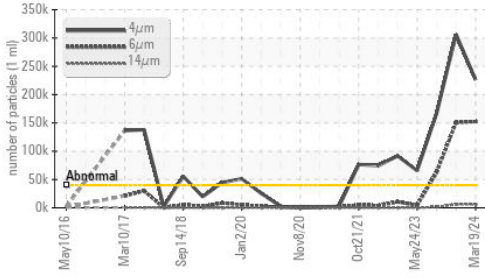
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.51	0.67	0.33	0.35

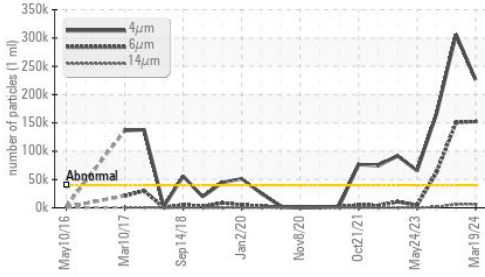


OIL ANALYSIS REPORT

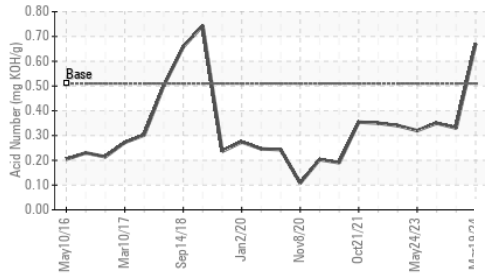
Particle Trend



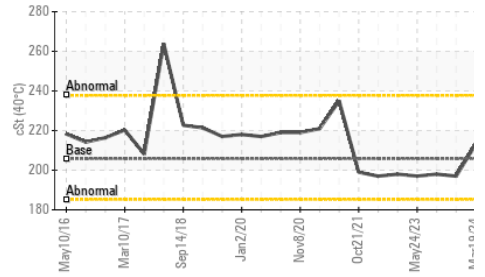
Particle Trend



Acid Number



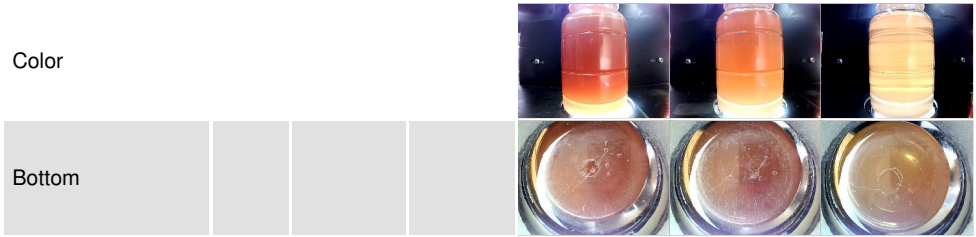
Viscosity @ 40°C



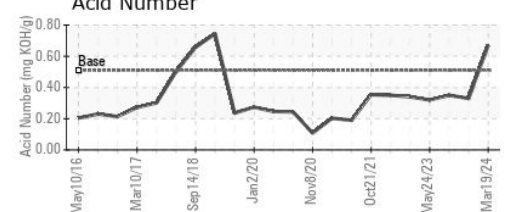
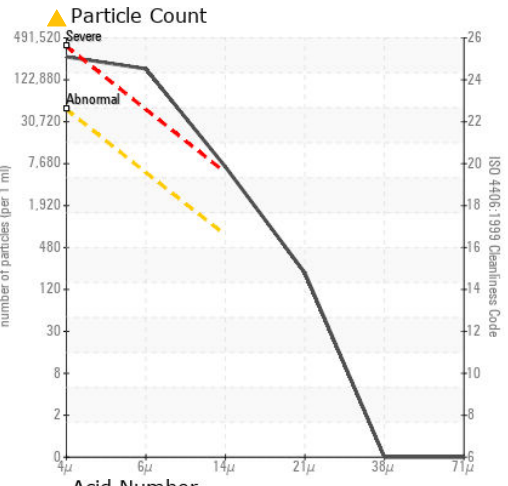
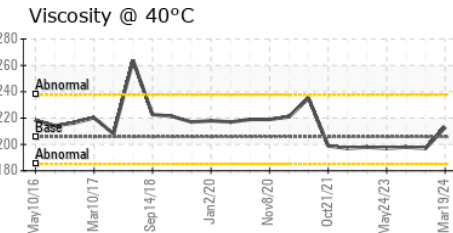
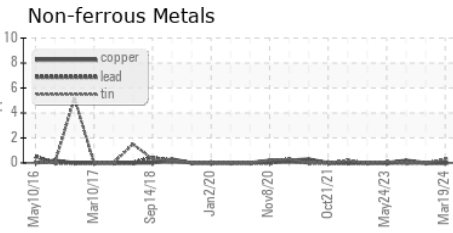
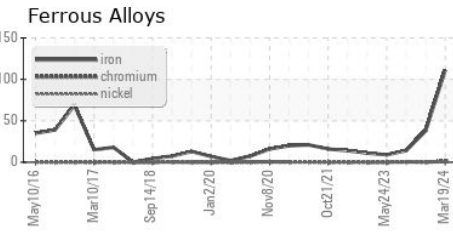
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	205.8	213	197

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. : WC0842530 Received : 20 Mar 2024
 Lab Number : 06123607 Tested : 27 Mar 2024
 Unique Number : 10937758 Diagnosed : 27 Mar 2024 - Jonathan Hester
 Test Package : IND 2 (Additional Tests: PrtCount)

PROGRESSIVE PROCESSING INC
 1205 CHAVENELLE CT
 DUBUQUE, IA
 US 52002
 Contact: BLAINE PURDY
 bepurdy@hormel.com
 T: (563)557-4500
 F: (563)557-4508

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)