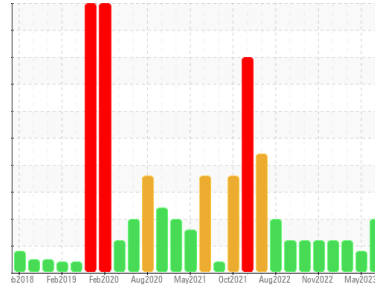




PROBLEM SUMMARY

Area
NORTH KETTLE ROOM
 Machine Id
BUSCH B26486 - KETTLE 3
 Component
Gearbox
 Fluid
PETRO CANADA 220 (--- GAL)

Sample Rating Trend

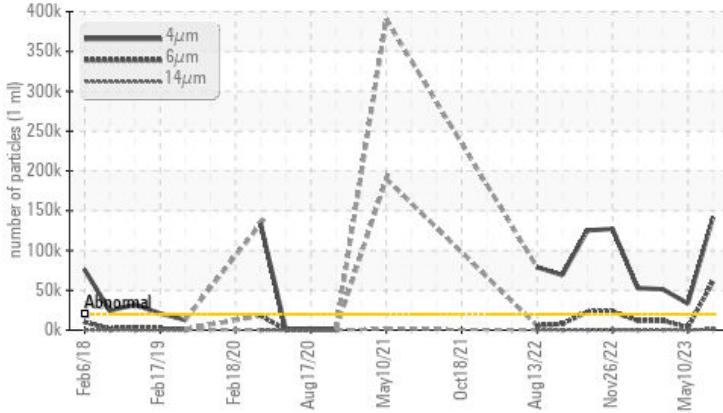


VISCOSITY

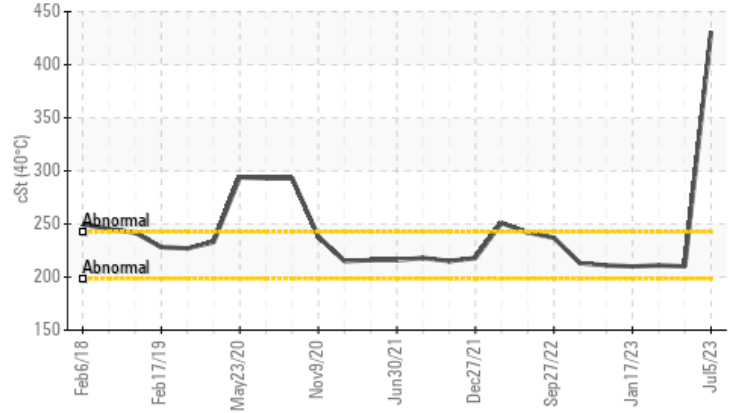


COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Viscosity @ 40°C



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ATTENTION	ABNORMAL
Particles >4µm	ASTM D7647	>20000	▲ 141738	▲ 33654	▲ 51276
Particles >6µm	ASTM D7647	>5000	▲ 61464	3698	▲ 11724
Particles >14µm	ASTM D7647	>640	▲ 1346	76	530
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/23/18	▲ 22/19/13	▲ 23/21/16
Visc @ 40°C	cSt	ASTM D445	▲ 431	210	211

Customer Id: ROCROCUS
 Sample No.: WC0820552
 Lab Number: 05902270
 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
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

10 May 2023 Diag: Jonathan Hester

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



10 Mar 2023 Diag: Don Baldrige

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



17 Jan 2023 Diag: Wes Davis

ISO



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

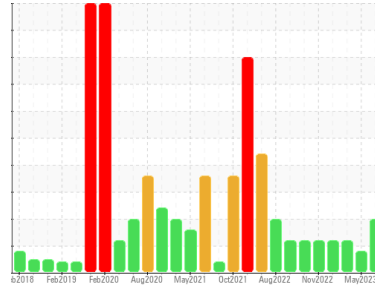
view report





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
NORTH KETTLE ROOM
Machine Id
BUSCH B26486 - KETTLE 3
Component
Gearbox
Fluid
PETRO CANADA 220 (--- GAL)

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

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

Fluid Condition

Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0820552	WC0799713	WC0781579
Sample Date	Client Info		05 Jul 2023	10 May 2023	10 Mar 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	ATTENTION	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	5	8	6
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 >25	15	2	1
Lead	ppm	ASTM D5185m >50	0	0	0
Copper	ppm	ASTM D5185m >200	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	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	<1	0	<1
Calcium	ppm	ASTM D5185m	25	1	0
Phosphorus	ppm	ASTM D5185m	513	156	139
Zinc	ppm	ASTM D5185m	0	0	2
Sulfur	ppm	ASTM D5185m	602	860	454

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	13	6	6
Sodium	ppm	ASTM D5185m	4	1	1
Potassium	ppm	ASTM D5185m >20	0	<1	<1

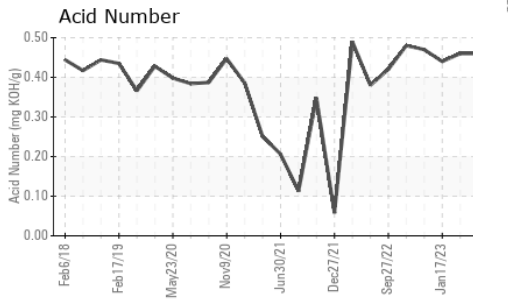
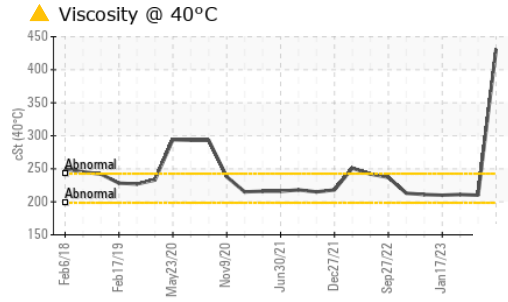
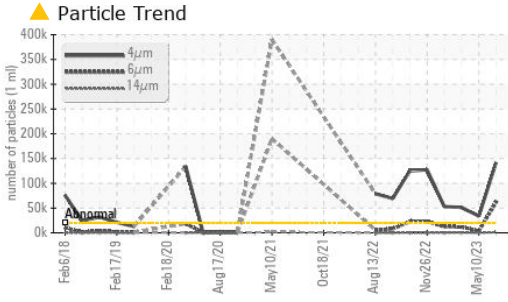
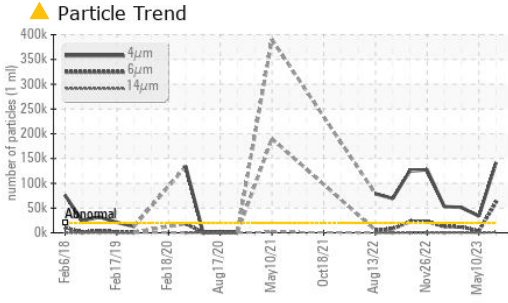
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 141738	▲ 33654	▲ 51276
Particles >6µm	ASTM D7647	>5000	▲ 61464	3698	▲ 11724
Particles >14µm	ASTM D7647	>640	▲ 1346	76	530
Particles >21µm	ASTM D7647	>160	73	11	43
Particles >38µm	ASTM D7647	>40	0	0	0
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/23/18	▲ 22/19/13	▲ 23/21/16

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.41	0.46	0.46

OIL ANALYSIS REPORT



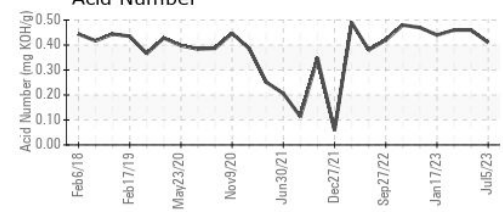
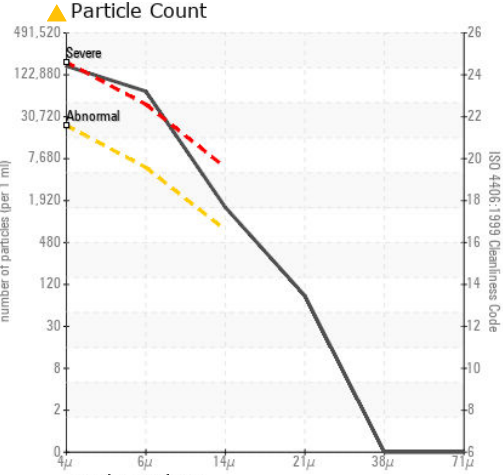
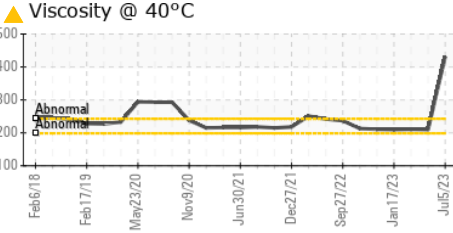
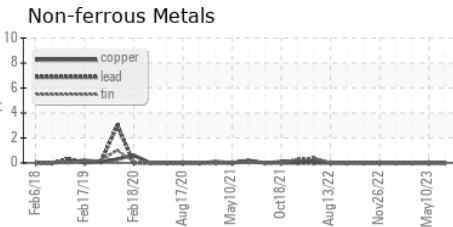
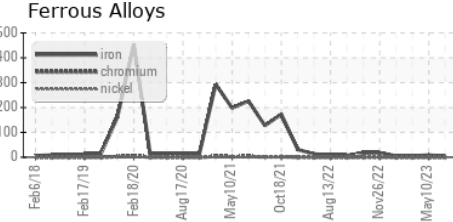
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	▲ 431	210	211

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0820552 **Received** : 19 Jul 2023
Lab Number : 05902270 **Diagnosed** : 21 Jul 2023
Unique Number : 10563626 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: PrtCount)

Rochelle Foods - PRE
 1001 South Main, P.O. Box 45
 Rochelle, IL
 US 61068
 Contact: JAMES ROBINSON III
 jrobinson3@hormel.com
 T:
 F: (815)562-4147

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)