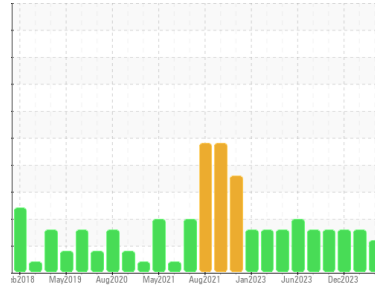




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**NORTH KETTLE ROOM**  
Machine Id  
**B25151 - KETTLE 1**  
Component  
**Gearbox**  
Fluid  
**PETRO CANADA PURITY FG SYN GEAR ISO 220 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) 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		<b>WC0885457</b>	WC0885420	WC0880630
Sample Date	Client Info		<b>02 Apr 2024</b>	06 Feb 2024	18 Dec 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	<b>5</b>	3	5
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>7</b>	7	6
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>3</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>9</b>	6	7
Phosphorus	ppm	ASTM D5185m		<b>227</b>	241	243
Zinc	ppm	ASTM D5185m		<b>6</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>973</b>	721	748

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	<b>9</b>	8	11
Sodium	ppm	ASTM D5185m		<b>5</b>	5	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 60376</b>	▲ 59225	▲ 72631
Particles >6µm	ASTM D7647	>5000	<b>● 6684</b>	● 5126	● 7245
Particles >14µm	ASTM D7647	>640	<b>94</b>	74	145
Particles >21µm	ASTM D7647	>160	<b>12</b>	9	22
Particles >38µm	ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/20/14</b>	▲ 23/20/13	▲ 23/20/14

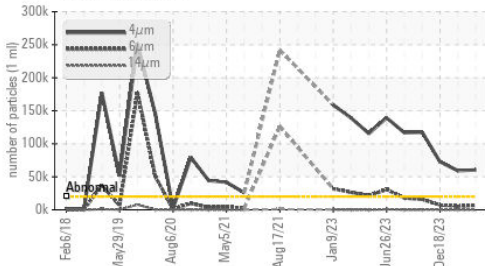
## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.42	<b>0.52</b>	0.46	0.47

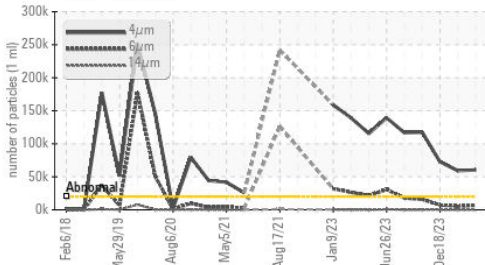


# OIL ANALYSIS REPORT

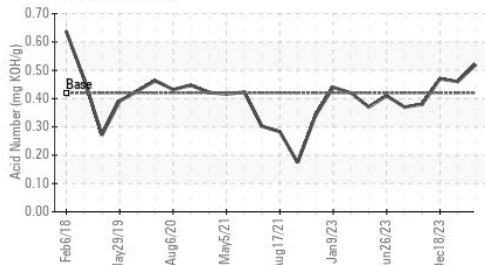
### Particle Trend



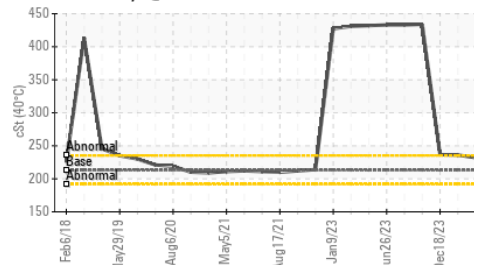
### Particle Trend



### Acid Number



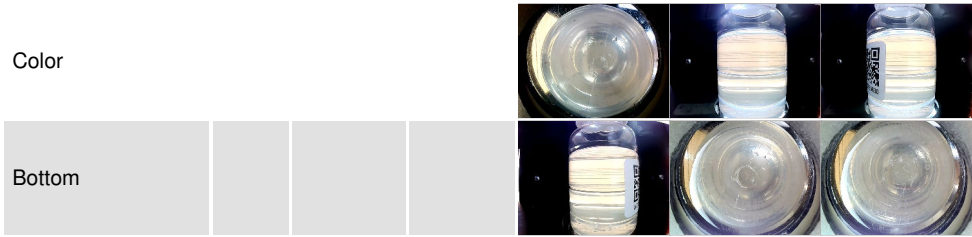
### Viscosity @ 40°C



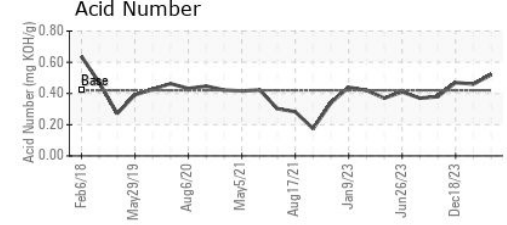
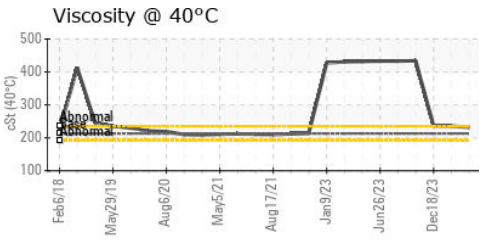
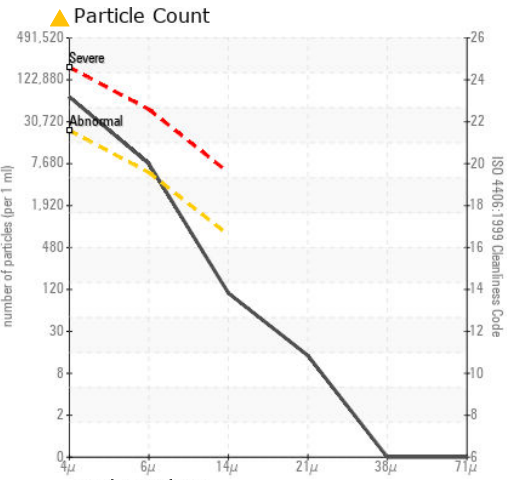
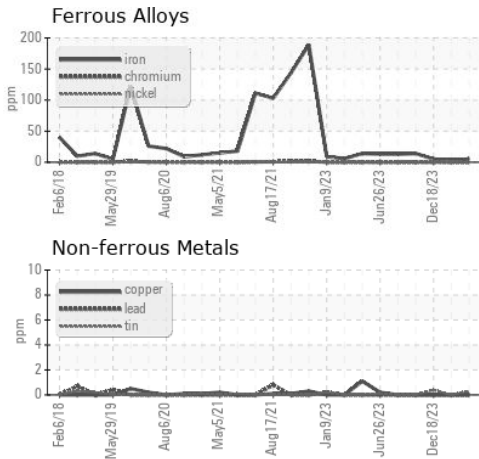
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 213	232	236	236.6

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.** : WC0885457 **Received** : 09 Apr 2024  
**Lab Number** : 06143020 **Tested** : 10 Apr 2024  
**Unique Number** : 10967828 **Diagnosed** : 11 Apr 2024 - Jonathan Hester  
**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

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)

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