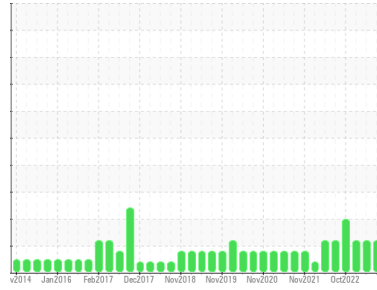




# PROBLEM SUMMARY

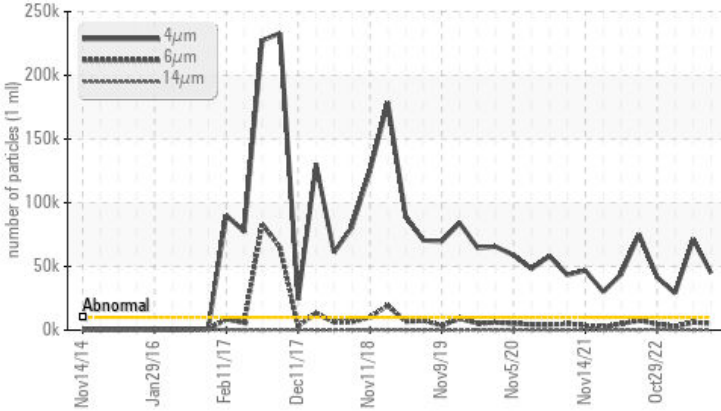
Area  
**RP-101**  
 Machine Id  
**B57019 GREEN CRAX AUGER**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA ENDURATEX EP 320 (--- QTS)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

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.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>10000	▲ <b>44971</b>	▲ 71511	▲ 28949
Particles >6µm	ASTM D7647	>2500	▲ <b>5355</b>	▲ 6017	▲ 3003
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ <b>23/20/15</b>	▲ 23/20/14	▲ 22/19/15

Customer Id: HORAUS  
 Sample No.: WC0826157  
 Lab Number: 05927203  
 Test Package: IND 2



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](mailto:wesd@wearcheck.ca)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## HISTORICAL DIAGNOSIS

### 07 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 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



### 11 Feb 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 notably high. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. 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



### 29 Oct 2022 Diag: Wes Davis

ISO



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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 >21µm are abnormally high. Particles >4µm are abnormally high. Particles >6µm are notably high. Particles >14µm are notably high. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. 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



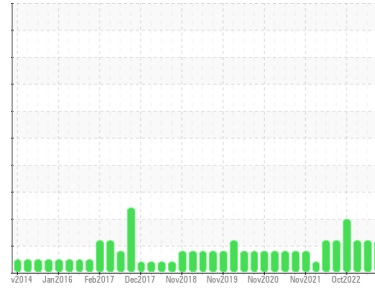


# OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Area  
**RP-101**  
 Machine Id  
**B57019 GREEN CRAX AUGER**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA ENDURATEX EP 320 (--- QTS)**



## DIAGNOSIS

### Recommendation

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.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above 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		<b>WC0826157</b>	WC0791989	WC0765480
Sample Date	Client Info		<b>06 Aug 2023</b>	07 May 2023	11 Feb 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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>18</b>	15	7
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 55	<b>11</b>	15	10
Barium	ppm	ASTM D5185m 0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 0	<b>3</b>	<1	0
Calcium	ppm	ASTM D5185m 0	<b>6</b>	6	5
Phosphorus	ppm	ASTM D5185m 240	<b>460</b>	419	430
Zinc	ppm	ASTM D5185m 1	<b>21</b>	23	19
Sulfur	ppm	ASTM D5185m 13700	<b>6394</b>	6042	6422

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>8</b>	26	5
Sodium	ppm	ASTM D5185m	<b>1</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>3</b>	2	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 44971</b>	▲ 71511	▲ 28949
Particles >6µm	ASTM D7647	>2500	<b>▲ 5355</b>	▲ 6017	▲ 3003
Particles >14µm	ASTM D7647	>320	<b>309</b>	86	195
Particles >21µm	ASTM D7647	>80	<b>95</b>	11	51
Particles >38µm	ASTM D7647	>20	<b>4</b>	0	2
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>▲ 23/20/15</b>	▲ 23/20/14	▲ 22/19/15

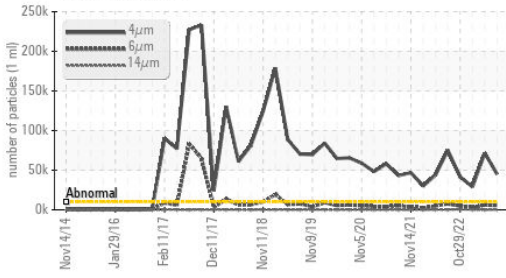
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.90</b>	0.89	0.85

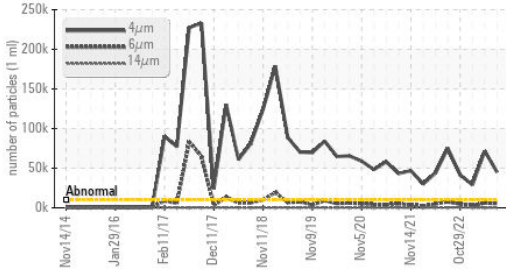


# OIL ANALYSIS REPORT

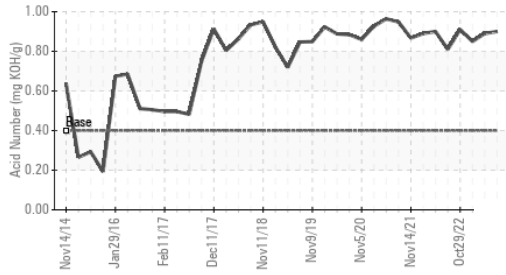
## ▲ Particle Trend



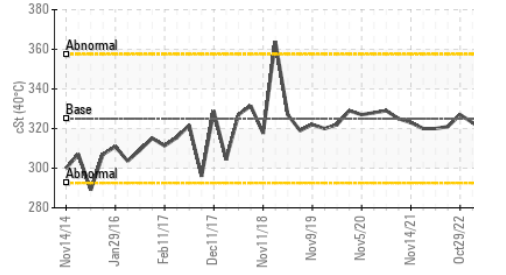
## ▲ Particle Trend



## Acid Number



## Viscosity @ 40°C

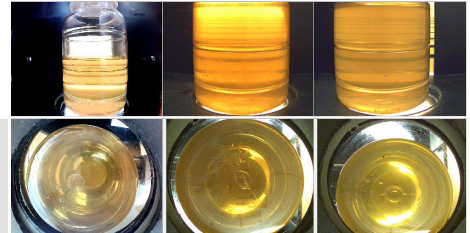


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	325	322	319

SAMPLE IMAGES	method	limit/base	current	history1	history2
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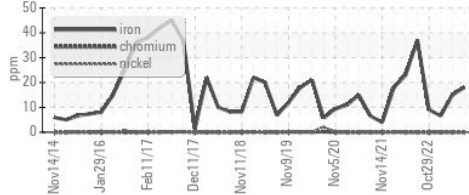
Color



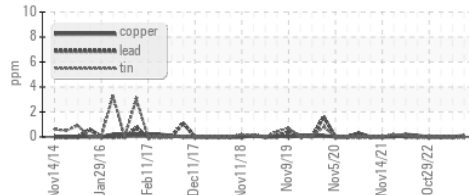
Bottom

## GRAPHS

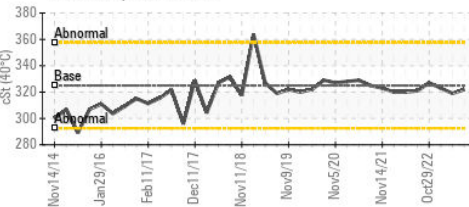
### Ferrous Alloys



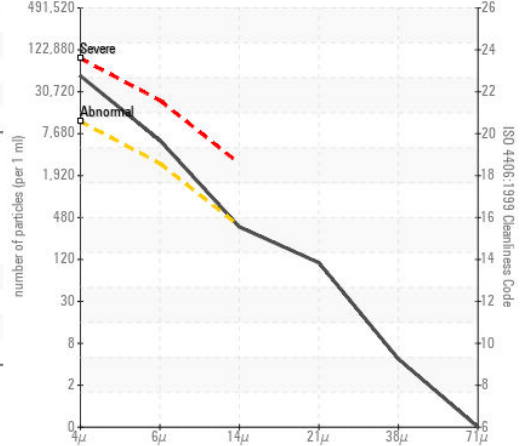
### Non-ferrous Metals



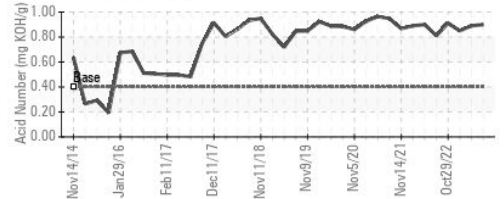
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0826157 Received : 17 Aug 2023  
 Lab Number : 05927203 Diagnosed : 18 Aug 2023  
 Unique Number : 10607150 Diagnostician : Wes Davis  
 Test Package : IND 2 ( Additional Tests: PrtCount )

**HORMEL FOODS - AUSTIN**  
 1101 NORTH MAIN ST  
 AUSTIN, MN  
 US 55912  
 Contact: RYAN LOWE  
 rslowe@hormel.com  
 T: (507)437-5674  
 F: (507)437-9805

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)