



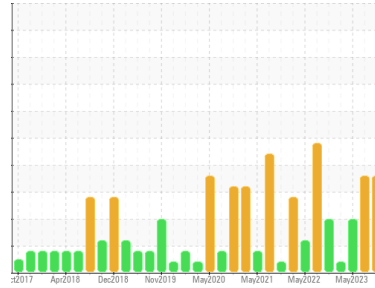
# PROBLEM SUMMARY

Sample Rating Trend

ISO

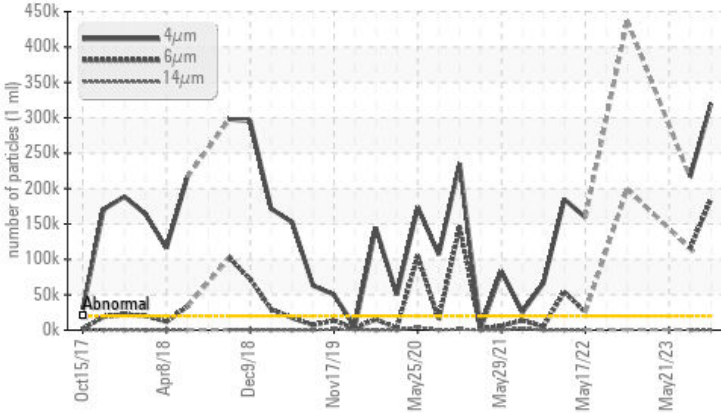


Area  
**FP-011**  
 Machine Id  
**A11620 - ALFA LAVAL SEPERATOR (S/N 42568)**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA ENDURATEX SYNTHETIC EP 320 (--- GAL)**



## COMPONENT CONDITION SUMMARY

### Particle Trend



## RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	ABNORMAL
Particles >4µm	ASTM D7647	>20000	320116	216073	---
Particles >6µm	ASTM D7647	>5000	185112	115342	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	26/25/16	25/24/16	---

Customer Id: HORAUS  
 Sample No.: WC0826106  
 Lab Number: 05904329  
 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	---	---	?	Resample in 30-45 days to monitor this situation.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

## HISTORICAL DIAGNOSIS

### 25 Jun 2023 Diag: Wes Davis

ISO



Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness code is much higher than 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



### 21 May 2023 Diag: Don Baldrige

WATER



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 08 May 2023 Diag: Don Baldrige

VIS DEBRIS



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report





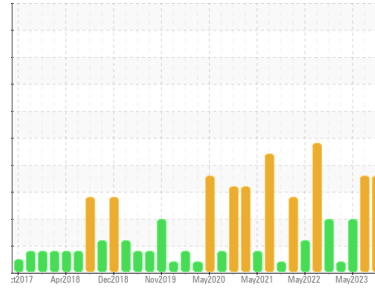
# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area  
**FP-011**  
 Machine Id  
**A11620 - ALFA LAVAL SEPERATOR (S/N 42568)**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA ENDURATEX SYNTHETIC EP 320 (--- GAL)**



## DIAGNOSIS

### Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. 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 high amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness code is much higher than 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>WC0826106</b>	WC0814181	WC0781451
Sample Date	Client Info		<b>16 Jul 2023</b>	25 Jun 2023	21 May 2023
Machine Age	days	Client Info	<b>0</b>	0	0
Oil Age	days	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>SEVERE</b>	SEVERE	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>25</b>	19	42
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	<1
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>12</b>	10	17
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 33	<b>30</b>	18	22
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 5	<b>3</b>	4	5
Calcium	ppm	ASTM D5185m 5	<b>8</b>	14	12
Phosphorus	ppm	ASTM D5185m 437	<b>347</b>	342	279
Zinc	ppm	ASTM D5185m 5	<b>7</b>	6	8
Sulfur	ppm	ASTM D5185m 5000	<b>19762</b>	18377	17866

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>1</b>	<1	2
Sodium	ppm	ASTM D5185m	<b>94</b>	54	88
Potassium	ppm	ASTM D5185m >20	<b>43</b>	31	53

## FLUID CLEANLINESS

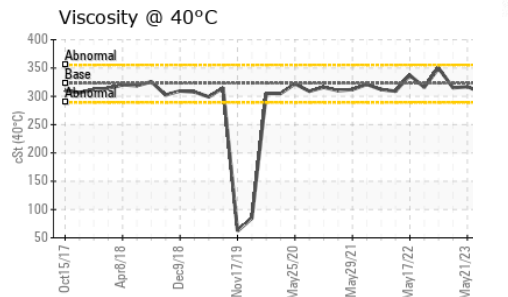
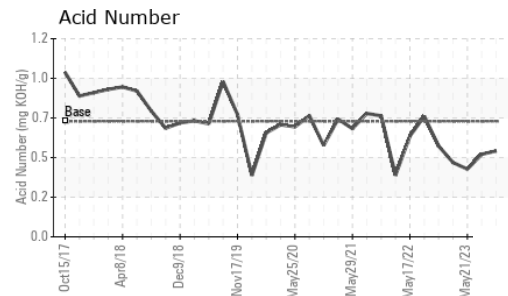
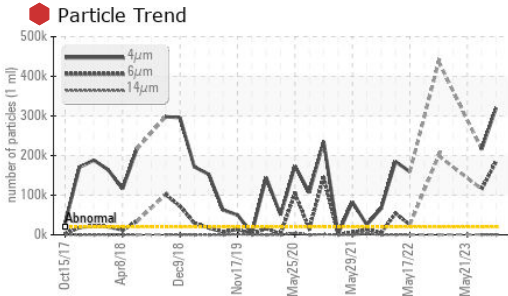
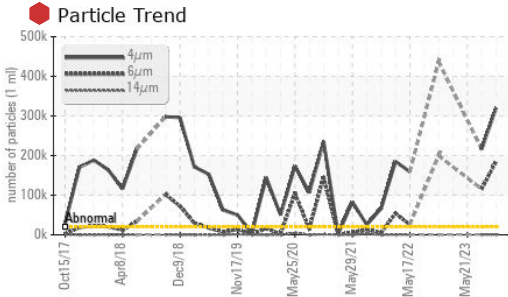
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>320116</b>	216073	---
Particles >6µm	ASTM D7647	>5000	<b>185112</b>	115342	---
Particles >14µm	ASTM D7647	>640	<b>471</b>	453	---
Particles >21µm	ASTM D7647	>160	<b>18</b>	18	---
Particles >38µm	ASTM D7647	>40	<b>1</b>	0	---
Particles >71µm	ASTM D7647	>10	<b>1</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>26/25/16</b>	25/24/16	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.7	<b>0.52</b>	0.50	0.41



# OIL ANALYSIS REPORT



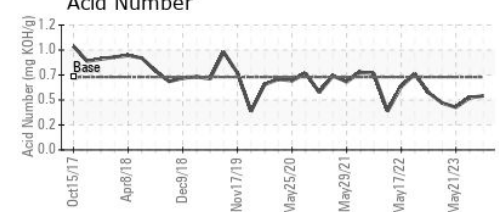
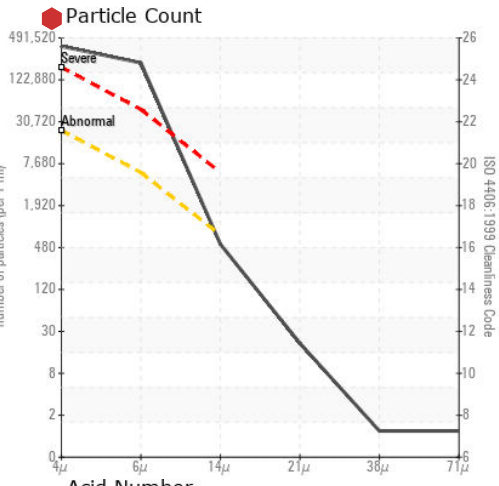
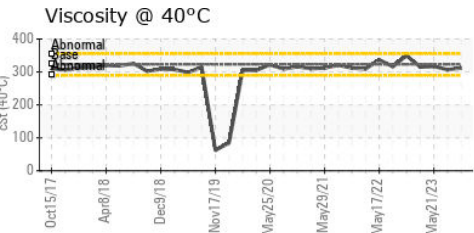
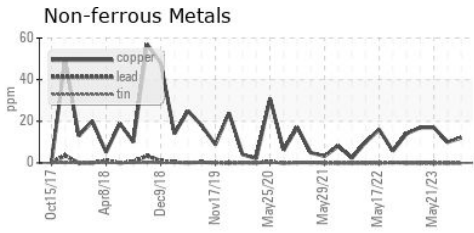
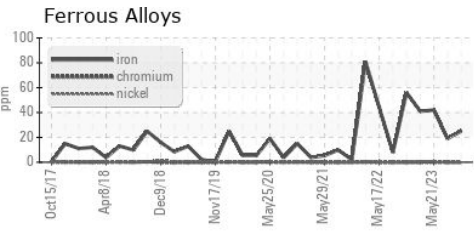
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 323	312	307	317

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.** : WC0826106 **Received** : 21 Jul 2023  
**Lab Number** : 05904329 **Diagnosed** : 24 Jul 2023  
**Unique Number** : 10565685 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**HORMEL FOODS - AUSTIN**  
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 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)