

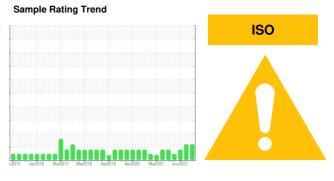
# **OIL ANALYSIS REPORT**

RP-101

# B57004 - SOUTH DISCHARGE SCREW (S/N 10023277475)

Gearbox

PETRO CANADA ENDURATEX EP 320 (--- GAL)



## **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.

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**

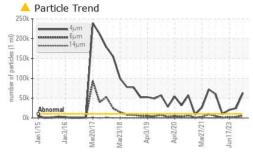
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

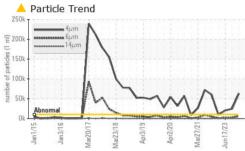
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0944839	WC0808568	WC0814178
Sample Date		Client Info		21 Jun 2024	27 Sep 2023	17 Jun 2023
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
CONTAMINATION	N	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	29	27	22
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	<1	<1	<1
Tin	ppm	ASTM D5185m	>25	0	0	0
Antimony	ppm	ASTM D5185m	>5			
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	nnm	ACTM DE10E		_	_	^
Oddiniani	ppm	ASTM D5185m		0	0	0
ADDITIVES	ррпп	method	limit/base	current	history1	history2
	ppm		limit/base	-		
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	55	current 24	history1 26	history2
ADDITIVES Boron Barium	ppm	method ASTM D5185m ASTM D5185m	55 0	current 24 0	history1 26 0	history2 30 0
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	55 0 0	current 24 0	history1 26 0 0	history2 30 0 0
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	55 0 0 0	current 24 0 0	history1 26 0 0 <1	history2 30 0 0 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	55 0 0 0 0	current  24  0  0  0 <1 0  4 422	history1 26 0 0 <1 <1	history2 30 0 0 <1 0
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm	method  ASTM D5185m	55 0 0 0 0 0	current 24 0 0 0 <1 0 4	history1  26  0  0  <1 <1 <1 <406 6	history2  30 0 0 <1 0 452 0
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus	ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	55 0 0 0 0 0 0 240	current  24  0  0  0 <1 0  4 422	history1  26  0  0  <1  <1  <1  406	history2 30 0 0 <1 0 452
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	55 0 0 0 0 0 0 240	current  24  0  0  <1  0  4  422  25	history1  26  0  0  <1 <1 <1 <406 6	history2  30  0  0  <1  0  452  0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	55 0 0 0 0 0 240 1 13700 limit/base	current  24  0  0  <1  0  4  422  25  6708	history1  26  0  0  <1 <1 <1 406  6 5505	history2  30  0  0  <1  0  452  0 6493
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	55 0 0 0 0 0 240 1 13700 limit/base	current  24  0  0  <1  0  4  422  25  6708  current	history1  26  0  0  <1 <1 <1 406 6 5505 history1	history2  30 0 0 0 <1 0 452 0 6493 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	55 0 0 0 0 0 240 1 13700 limit/base >50	current  24  0  0  <1  0  4  422  25  6708  current  <1	history1  26  0  0  <1 <1 <1 406 6 5505 history1 <1	history2 30 0 0 0 <1 0 452 0 6493 history2 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	55 0 0 0 0 0 240 1 13700 limit/base >50	current  24  0  0  <1  0  4  422  25  6708  current  <1  <1	history1  26  0  0  <1 <1 <1 406 6 5505  history1 <1 <1	history2 30 0 0 0 <1 0 452 0 6493 history2 <1 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	55 0 0 0 0 0 240 1 13700 limit/base >50 >20	current  24  0  0  <1  0  4  422  25  6708  current  <1  <1  2	history1  26  0  0  <1 <1 <1 406 6 5505  history1 <1 <1 <1	history2  30  0  0  0  <1  0  452  0 6493  history2  <1  0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	55 0 0 0 0 0 240 1 13700 limit/base >50	current  24  0  0  4  422  25  6708  current  <1  current	history1  26  0  0  <1 <1 <1 406 6 5505  history1 <1 <1 history1	history2  30  0  0  <1  0  452  0 6493  history2  <1  0 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  method ASTM D5185m	55 0 0 0 0 0 240 1 13700 limit/base >50 	current  24  0  0  <1  0  4  422  25  6708  current  <1  2  current  ▲ 63526	history1  26  0  0  <1 <1 <1 406 6 5505 history1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	history2  30  0  0  <1  0  452  0 6493  history2  <1  <1  0  history2  ▲ 20491
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m method ASTM D5185m	55 0 0 0 0 240 1 13700 limit/base >50 >20 limit/base	current  24  0  0  <1  0  4  422  25  6708  current  <1  <1  2  current  ▲ 63526  ▲ 6279	history1  26  0  0  <1 <1 <1 406 6 5505 history1 <1 <1 <1 <1 <1 <21 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	history2 30 0 0 0 <1 0 452 0 6493 history2 <1 <1 0 history2  ▲ 20491 2099
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647	55 0 0 0 0 240 1 13700 limit/base >50 >20 limit/base >10000 >2500 >320	current  24  0  0  <1  0  4  422  25  6708  current  <1  <1  2  current  △ 63526  △ 6279  121	history1  26  0  0  <1 <1 <1 <406 6 5505  history1 <1 <1 <1 <1  24510  2960 83	history2  30 0 0 0 <1 0 452 0 6493 history2 <1 <1 0 history2  ▲ 20491 2099 73
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	55 0 0 0 0 240 1 13700 limit/base >50 >20 limit/base >10000 >2500 >320 >80 >20	current  24  0  0  <1  0  4  422  25  6708  current  <1  <1  2  current  ▲ 63526  ▲ 6279  121  21	history1  26  0  0  <1 <1 <1 406 6 5505  history1 <1 <1 <1 <1 24510  2960 83 27	history2  30  0  0  0  <1  0  452  0 6493  history2  <1 <1  0  history2  ▲ 20491  2099  73  16

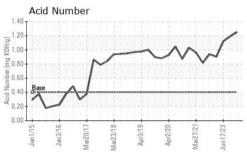
Contact/Location: RYAN LOWE - HORAUS

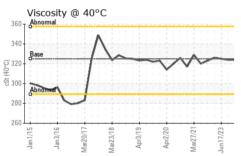


# OIL ANALYSIS REPORT

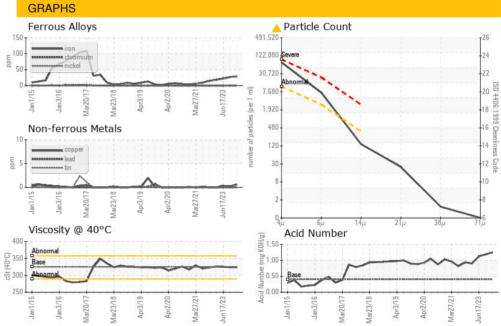
















Certificate 12367

Laboratory

Sample No. Lab Number : 06221159 Unique Number : 11099356

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0944839

Received **Tested** 

: 26 Jun 2024 : 27 Jun 2024

Diagnosed : 27 Jun 2024 - Wes Davis

Test Package : IND 2 ( Additional Tests: PrtCount )

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. **HORMEL FOODS - AUSTIN** 

1101 NORTH MAIN ST AUSTIN, MN

US 55912 Contact: RYAN LOWE rslowe@hormel.com T: (507)437-5674

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (507)437-9805