

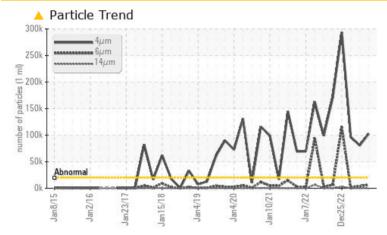
PROBLEM SUMMARY

Area **RP-101** [10023546083] Machine Id **B57011** INCLINE DRAINER AUGER Component

Gearbox

PETRO CANADA ENDURATEX EP 320 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS							
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL		
Particles >4µm	ASTM D7647	>20000	<u> </u>	▲ 80611	▲ 96474		
Particles >6µm	ASTM D7647	>5000	6243	4145	2076		
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<u> </u>	🔺 24/19/15	4 /18/12		

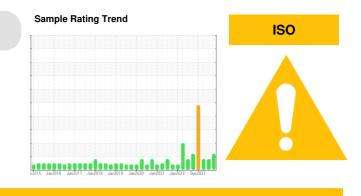
Customer Id: HORAUS Sample No.: WC0851164 Lab Number: 05964575 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>



There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

26 Jun 2023 Diag: Doug Bogart



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 < 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.



30 Mar 2023 Diag: Don Baldridge

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.





25 Dec 2022 Diag: Wes Davis

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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. 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. Particles >6µm are severely high. Oil Cleanliness are severely high. Particles >4µm are severely high. Particles >21µm are abnormally high. Particles >38µm are notably high. 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.





OIL ANALYSIS REPORT

Area **RP-101** [10023546083] Machine Id **B57011** INCLINE DRAINER AUGER Component

Gearbox

PETRO CANADA ENDURATEX EP 320 (--- GAL)

DIAGNOSIS

A Recommendation

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

Wear

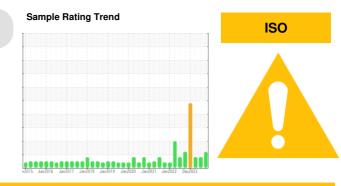
All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 6 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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0851164	WC0820571	WC0781526
Sample Date		Client Info		24 Sep 2023	26 Jun 2023	30 Mar 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
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	8	4	5
Chromium	ppm	ASTM D5185m	>15	0	0	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	26	27	25
Tin	ppm	ASTM D5185m	>25	4	4	3
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	55	77	38	33
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	5	<1	2
Calcium	ppm	ASTM D5185m	0	6	4	0
Phosphorus	ppm	ASTM D5185m	240	403	433	466
Zinc	ppm	ASTM D5185m	1	23	13	2
Sulfur	ppm	ASTM D5185m	13700	5377	6820	6433
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	0	<1	<1
Sodium	ppm	ASTM D5185m		2	1	0
Potassium	ppm	ASTM D5185m	>20	2	<1	0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	102606	▲ 80611	9 6474
Particles >6µm		ASTM D7647	>5000	<u> </u>	4145	2076
Particles >14µm		ASTM D7647	>640	61	206	32
Particles >21µm		ASTM D7647	>160	15	54	9
Particles >38µm		ASTM D7647	>40	1	4	0
Particles >71µm		ASTM D7647	>10	0	2	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	4/20/13	4 /19/15	4/18/12
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.15	2.05	1.80
× /	5 0					



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Base

Jan8/

Abn

Bas 320

Jan 8/15

Abnorma

Jan2/16

Jan2/1 an23/1

Viscosity @ 40°C

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@^{2.50} hor (mg KOH 2.00 1.50 1.00 A bioA 0.20

0.00

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400

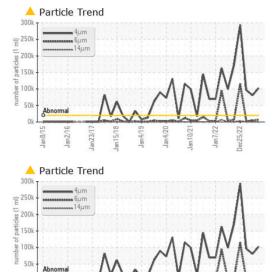
() 380 · () 360 · () 360 · 340 ·

300

280

Acid Number

OIL ANALYSIS REPORT



Jan4/19

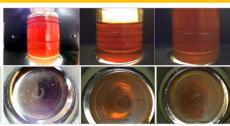
Jan 15/18

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m23/1

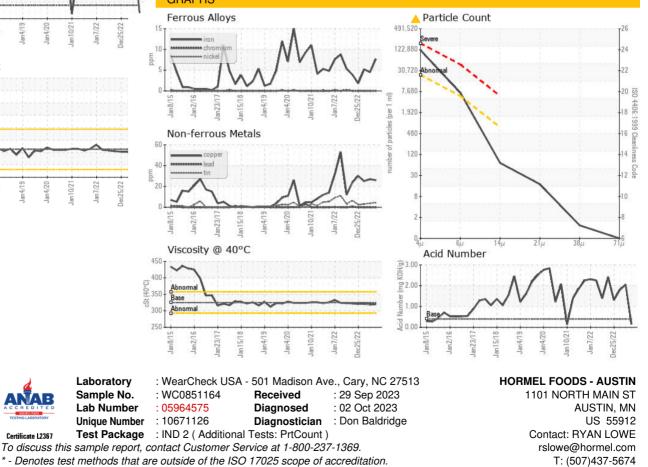
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	325	320	319	321
SAMPLE IMAGES	S	method	limit/base	current	history1	history2

Color



Bottom

GRAPHS



* - 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)

Contact/Location: RYAN LOWE - HORAUS

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