

## **OIL ANALYSIS REPORT**

## WH-100 Machine Id B25970 - STORK COOKER GEARBOX #3 (1ST ON STERILE SECTION)

Gearbox Fluid

### PETRO CANADA ENDURATEX WG 680 (40 GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.



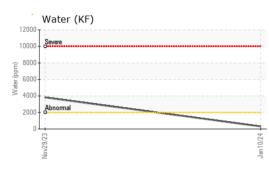
SAMPLE INFORM	ΛΑΤΙΟΝ	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0880587	WC0856024	WC0826078
Sample Date		Client Info		10 Jan 2024	29 Nov 2023	25 Jul 2023
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	16	5	8
Chromium	ppm	ASTM D5185m	>15	<1	0	0
Nickel	ppm	ASTM D5185m	>15	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	0	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	11	9	10
Tin	ppm		>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	1	0	0	0
Barium	ppm	ASTM D5185m	1	3	0	0
Molybdenum	ppm	ASTM D5185m	1	0	0	0
Manganese	ppm	ASTM D5185m	1	0	<1	0
Magnesium	ppm	ASTM D5185m	1	0	0	0
Calcium	ppm	ASTM D5185m	1	<1	<1	0
Phosphorus	ppm	ASTM D5185m	1	48	<1	6
Zinc	ppm	ASTM D5185m	1	0	12	6
Sulfur	ppm	ASTM D5185m	3114	3054	2408	3205
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	1	1	<1
Sodium	ppm	ASTM D5185m		0	<1	0
Potassium	ppm	ASTM D5185m	>20	<1	0	<1
Water	%	ASTM D6304	>0.2	0.031	▲ 0.382	
ppm Water	ppm	ASTM D6304	>2000	310	▲ 3820	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	7520		▲ 292539
Particles >6µm		ASTM D7647	>2500	958		🔺 235663
Particles >14µm		ASTM D7647	>320	39		<b>4</b> 5197
Particles >21µm		ASTM D7647	>80	7		▲ 3522
Particles >38µm		ASTM D7647	>20	1		5
Particles >71µm		ASTM D7647	>4	0		0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	20/17/12		▲ 25/25/23
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.43	1.21	1.01	1.36

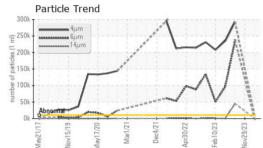
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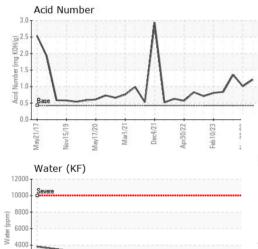
Contact/Location: RYAN LOWE - HORAUS



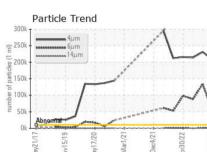
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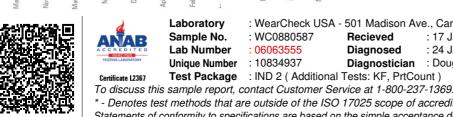










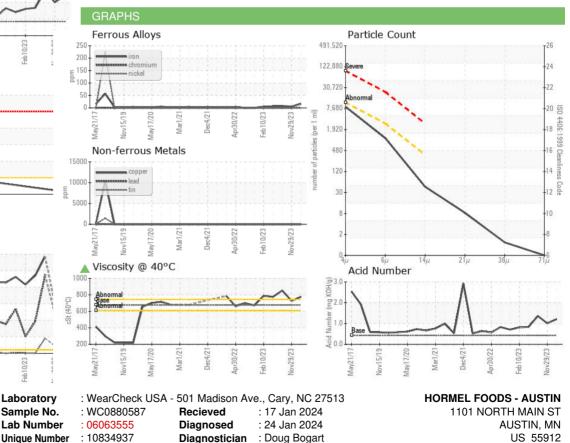


NONE NONE White Metal \*Visual NONE NONE scalar NONE NONE NONE NONE Yellow Metal scalar \*Visual Precipitate \*Visual NONE NONE NONE NONE scalar Silt scalar \*Visual NONE NONE MODER NONE NONE NONE NONE Debris \*Visual NONE scalar NONE Sand/Dirt scalar \*Visual NONE NONE NONE NORML Appearance NORML NORML NORML scalar \*Visua Odor NORML NORML NORML NORML scalar \*Visual \*Visual **Emulsified Water** scalar >0.2 0.2% 0.2% NEG Free Water scalar \*Visual NEG NEG NEG FLUID PROPERTIES ▲ 852 Visc @ 40°C cSt ASTM D445 676.7 **A** 775.6 726 SAMPLE IMAGES

Color



Bottom



\* - 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)

Test Package : IND 2 (Additional Tests: KF, PrtCount)

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