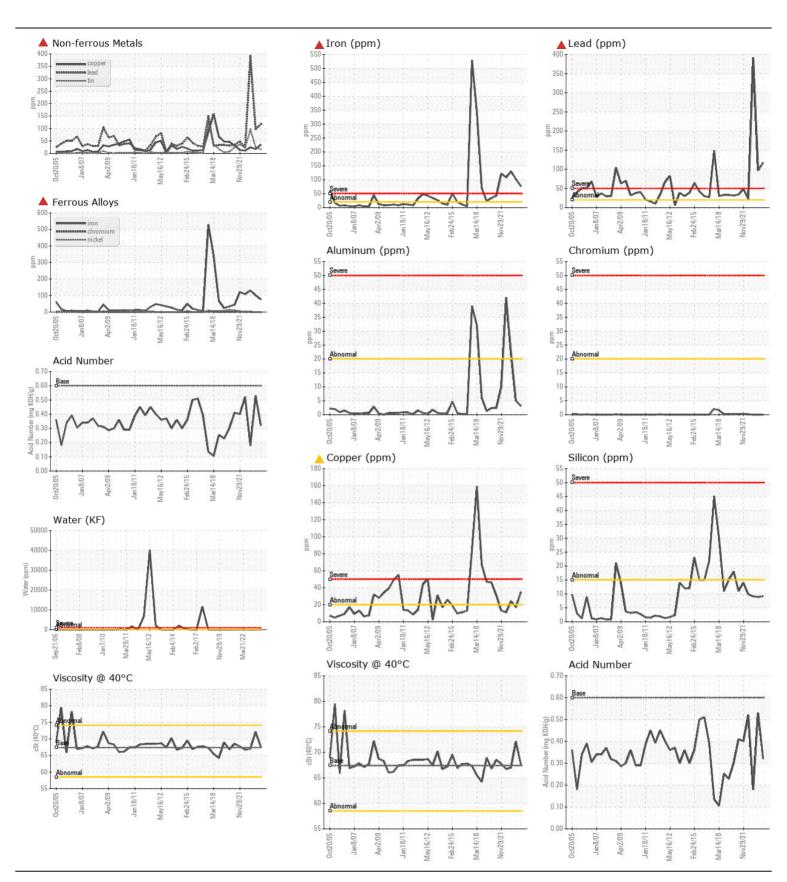
WEAR CONTAMINATION FLUID CONDITION

SEVERE NORMAL NORMAL

Machine Id

Unit #3, West FD Fan In Board (S/N 8393)

Inboard Bearing Fluid PETERO CANADA HYDREY AW 62 (15 LTP)	ŕ						
PETRO CANADA HYDREX AW 68 (15 LTR)							
RECOMMENDATION We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0927093	WC0805103	WC0677241
	Sample Date		Client Info		15 May 2024	12 Dec 2023	28 Nov 2022
	Machine Age	mths	Client Info		0	0	0
	Oil Age	mths	Client Info		2820	0	0
	Filter Age	mths	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				SEVERE	SEVERE	SEVERE
WEAR	PQ		ASTM D8184*		37	<u> </u>	8
Iron and lead ppm levels are severe. Copper ppm levels are abnormal. Antimony ppm levels are noted. Bearing wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.	Iron	ppm	ASTM D5185(m)	>20	A 76	1 01	1 30
	Chromium	ppm	ASTM D5185(m)	>20	0	0	0
	Nickel	ppm	ASTM D5185(m)	>20	<1	<1	3
	Titanium	ppm	ASTM D5185(m)		0	0	<1
	Silver	ppm	ASTM D5185(m)		0	0	0
	Aluminum	ppm	ASTM D5185(m)	>20	3	5	<u>^</u> 22
	Lead	ppm	ASTM D5185(m)	>20	117	4 97	▲ 391
	Copper	ppm	ASTM D5185(m)	>20	△ 35	17	<u>4</u> 24
	Tin	ppm	ASTM D5185(m)	>20	16	<u> </u>	4 95
	Vanadium	ppm	ASTM D5185(m)		0	0	2
	White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>15	9	9	9
The water content is negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	0	<1	2
	Water	%	ASTM D6304*	>2	0.008		
	ppm Water	ppm	ASTM D6304*		90		
	Silt	scalar	Visual*	NONE	VLITE	VLITE	NONE
	Debris	scalar	Visual*	NONE	VLITE	VLITE	NONE
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
	Appearance	scalar	Visual*	NORML	HAZY	NORML	NORML
	Odor	scalar	Visual*	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	Visual*	>2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		<1	1	2
The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.	Boron	ppm	ASTM D5185(m)	0	<1	0	<1
	Barium	ppm	ASTM D5185(m)	0	<1	0	0
	Molybdenum	ppm	ASTM D5185(m)	0	0	0	<1
	Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
	Magnesium	ppm	ASTM D5185(m)	0	<1	<1	<1
	Calcium	ppm	ASTM D5185(m)	50	30	36	_ 2
	Phosphorus	ppm	ASTM D5185(m)	330	311	325	256
	Zinc	ppm	ASTM D5185(m)	430	276	351	127
	Sulfur	ppm	ASTM D5185(m)	760	756	1115	3747
	Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.32	0.53	0.18
	Visc @ 40°C	cSt	ASTM D7279(m)	67.4	67.5	72.1	67.0





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number

: WC0927093

: 02638128 : 5787290 Unique Number Test Package: MOB 2 (Additional Tests: KF, PQ)

To discuss this sample report, contact Customer Service at 1-800-268-2131.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 28 May 2024 **Tested** : 31 May 2024 Diagnosed

: 31 May 2024 - Kevin Marson

HOLYROOD THERMAL GEN. STN.,, PO BOX 29, DUFFS RD CONCEPTION BAY, NL

CA A0A 2R0 Contact: Rory Tweedie rorytweedie@nlh.nl.ca T: (709)229-2764

NEWFOUNDLAND & LABRADOR HYDRO

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

F: (709)229-7894