



# OIL ANALYSIS REPORT

WEAR	<b>MARGINAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**12B05#01B02 - Port Motor Bearings**  
 Component  
**Front Bearing**  
 Fluid  
**PETRO CANADA HYDREX AW 100 (38 LTR)**

## RECOMMENDATION

We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0747586</b>	WC0742532	WC0747601
Sample Date		Client Info		<b>11 Feb 2024</b>	12 Sep 2023	20 Jan 2023
Machine Age	hrs	Client Info		<b>0</b>	36346	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	27
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>None</b>	None	None
Sample Status				<b>MARGINAL</b>	MARGINAL	ABNORMAL

## WEAR

Copper ppm levels are marginal. All other component wear rates are normal.

PQ		ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m)	>20	<b>2</b>	2	2
Chromium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m)	>25	<b>8</b>	5	6
Copper	ppm	ASTM D5185(m)	>5	<b>▲ 14</b>	<b>▲ 14</b>	<b>▲ 14</b>
Tin	ppm	ASTM D5185(m)	>15	<b>3</b>	3	3
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

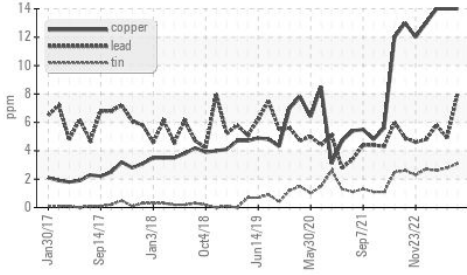
Silicon	ppm	ASTM D5185(m)	>15	<b>9</b>	12	9
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

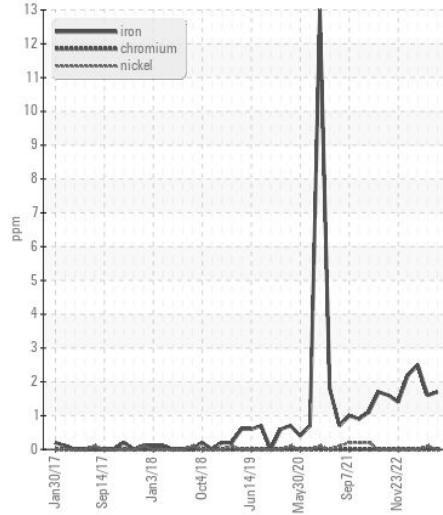
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	1
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	1	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Calcium	ppm	ASTM D5185(m)	50	<b>73</b>	73	77
Phosphorus	ppm	ASTM D5185(m)	330	<b>329</b>	324	348
Zinc	ppm	ASTM D5185(m)	430	<b>404</b>	413	414
Sulfur	ppm	ASTM D5185(m)	760	<b>804</b>	898	819
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	<b>0.34</b>	0.43	0.39
Visc @ 40°C	cSt	ASTM D7279(m)	101	<b>101</b>	102	101

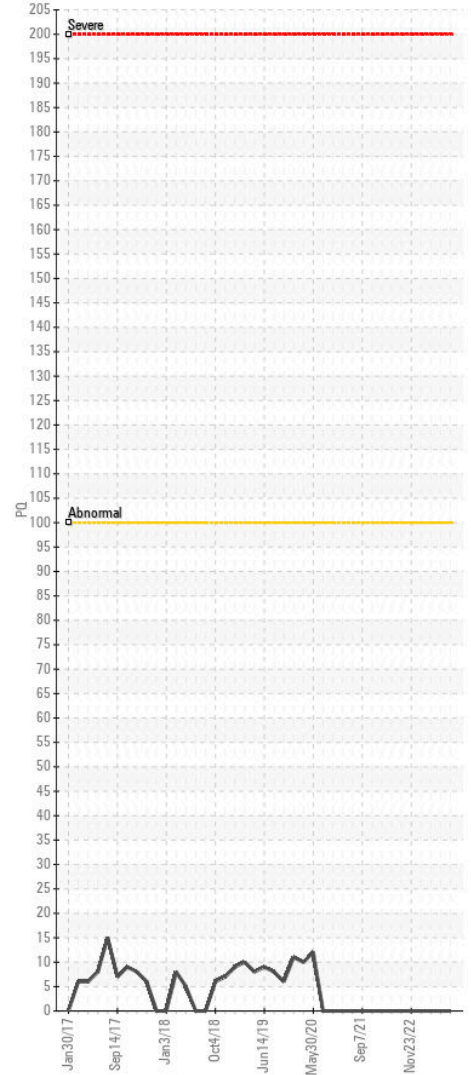
▲ Non-ferrous Metals



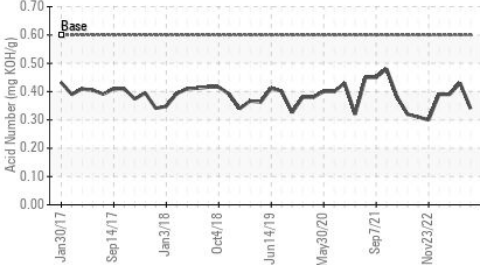
Ferrous Alloys



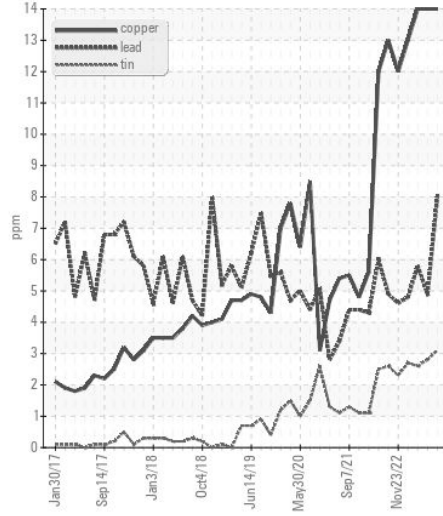
PQ



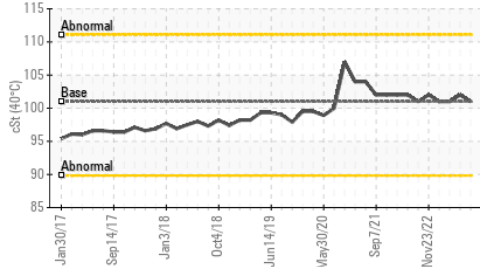
Acid Number



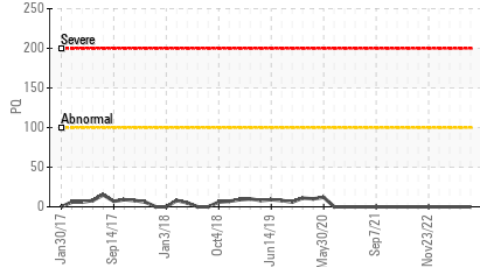
▲ Non-ferrous Metals



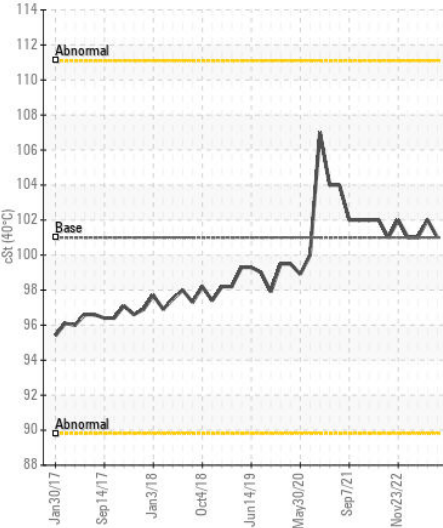
Viscosity @ 40°C



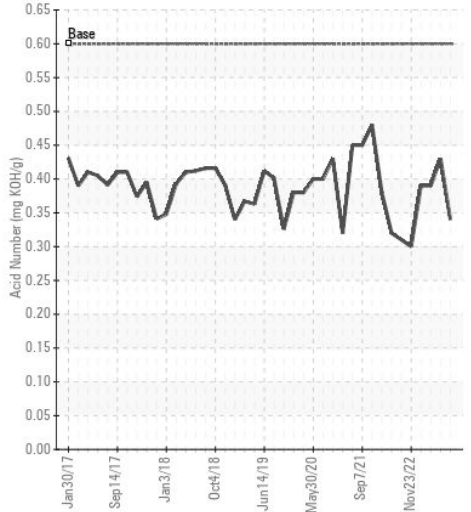
PQ



Viscosity @ 40°C



Acid Number



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0747586  
**Lab Number** : 02616660  
**Unique Number** : 5733770  
**Test Package** : MAR 2

**Received** : 20 Feb 2024  
**Tested** : 21 Feb 2024  
**Diagnosed** : 21 Feb 2024 - Kevin Marson

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