



# OIL ANALYSIS REPORT

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

Area  
**SAMUEL RIS**  
 Machine Id  
**S30-81212 Anchor Windlass Gearbox**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA ENDURATEX EP 100 (40 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0869833</b>	WC0638122	WC0638113
Sample Date		Client Info		<b>28 May 2024</b>	02 Jun 2023	31 May 2022
Machine Age	mths	Client Info		<b>462</b>	450	438
Oil Age	mths	Client Info		<b>12</b>	12	12
Filter Age	mths	Client Info		<b>12</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>None</b>	None	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m)	>150	<b>3</b>	4	7
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Lead	ppm	ASTM D5185(m)	>65	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>80	<b>0</b>	0	<1
Tin	ppm	ASTM D5185(m)	>8	<b>0</b>	0	0
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

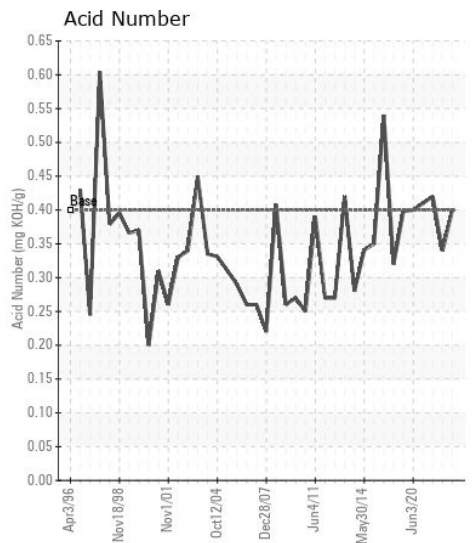
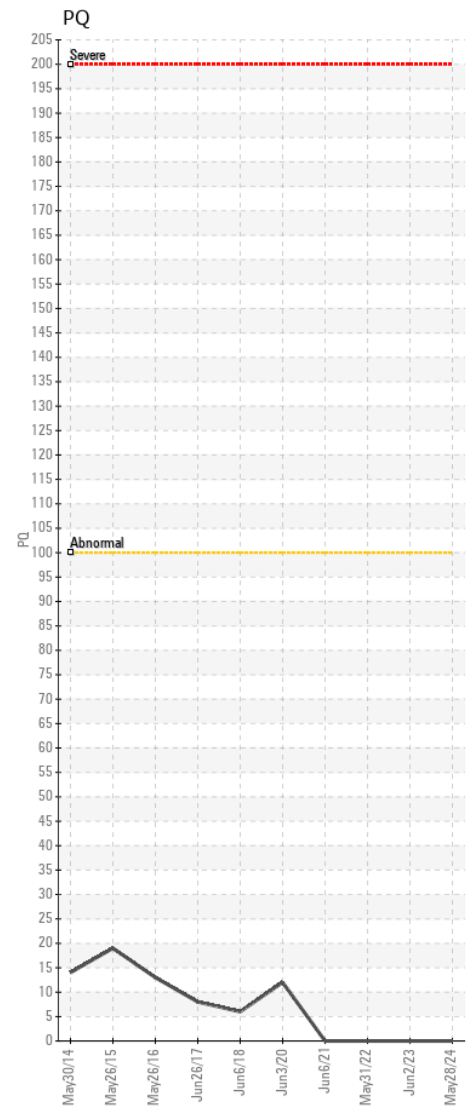
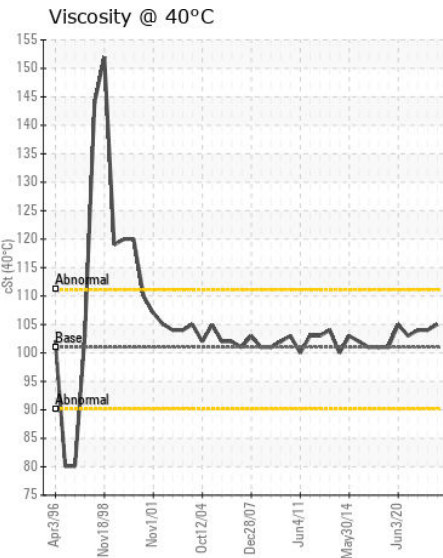
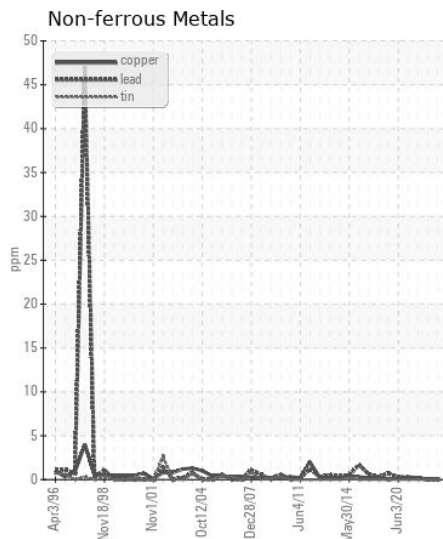
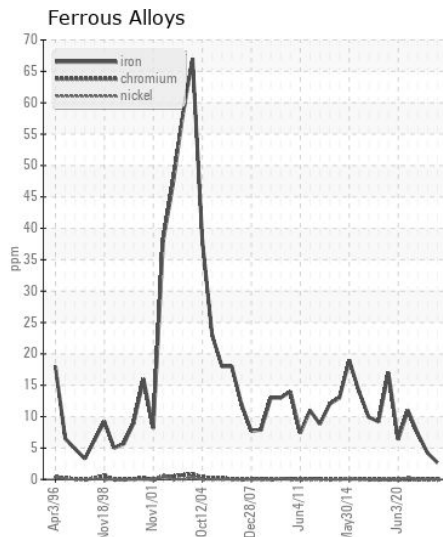
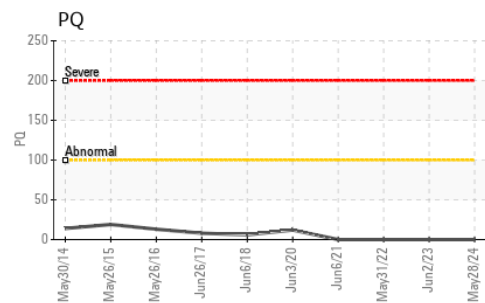
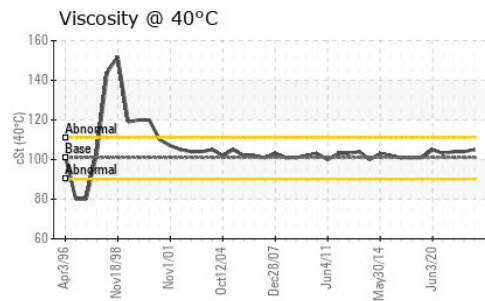
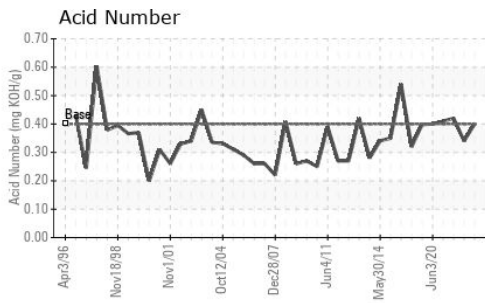
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	2
Water		WC Method	>0.2	<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*	>0.2	<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	0
Boron	ppm	ASTM D5185(m)	50	<b>63</b>	62	60
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	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>	0	<1
Calcium	ppm	ASTM D5185(m)	0	<b>2</b>	<1	3
Phosphorus	ppm	ASTM D5185(m)	270	<b>251</b>	266	261
Zinc	ppm	ASTM D5185(m)	0	<b>6</b>	6	8
Sulfur	ppm	ASTM D5185(m)	4500	<b>4278</b>	4130	4393
Acid Number (AN)	mg KOH/g	ASTM D974*	0.4	<b>0.40</b>	0.34	0.42
Visc @ 40°C	cSt	ASTM D7279(m)	101	<b>105</b>	104	104



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0869833  
**Lab Number** : 02640344  
**Unique Number** : 5789506  
**Test Package** : MAR 2 ( Additional Tests: TAN Man )

**Received** : 06 Jun 2024  
**Tested** : 07 Jun 2024  
**Diagnosed** : 07 Jun 2024 - Wes Davis

**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.