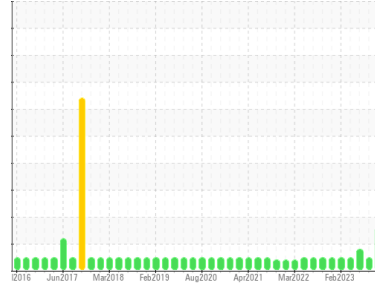


Area
TEAM 1
Machine Id
122651 Pump Outboard
Component
Bearing
Fluid
PETRO CANADA TURBOFLO R&O 32 (2 LTR)



DIAGNOSIS

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.

Wear

Tin and copper ppm levels are abnormal. Bearing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info	PC0076937	PC0069901	PC0069844
Sample Date	Client Info	22 Jan 2024	06 Oct 2023	10 Aug 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	NORMAL	ABNORMAL

CONTAMINATION method limit/base current history1 history2

Water	WC Method	>2	NEG	NEG	NEG
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WEAR METALS method limit/base current history1 history2

PQ	ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>20	0	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	<1
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)		0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	0
Lead	ppm	ASTM D5185(m)	>20	3	<1
Copper	ppm	ASTM D5185(m)	>20	▲ 44	9
Tin	ppm	ASTM D5185(m)	>20	▲ 16	4
Antimony	ppm	ASTM D5185(m)		<1	0
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		0	0

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185(m)		0	<1
Barium	ppm	ASTM D5185(m)		0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0
Manganese	ppm	ASTM D5185(m)		0	0
Magnesium	ppm	ASTM D5185(m)		0	0
Calcium	ppm	ASTM D5185(m)	0	0	<1
Phosphorus	ppm	ASTM D5185(m)	4	3	3
Zinc	ppm	ASTM D5185(m)	0	1	1
Sulfur	ppm	ASTM D5185(m)		111	135
Lithium	ppm	ASTM D5185(m)		<1	<1

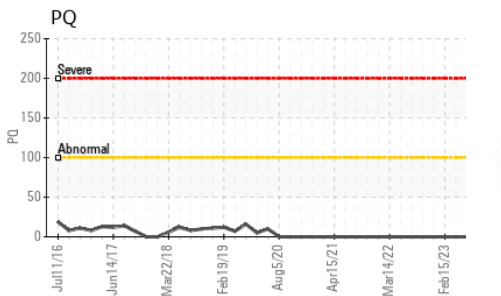
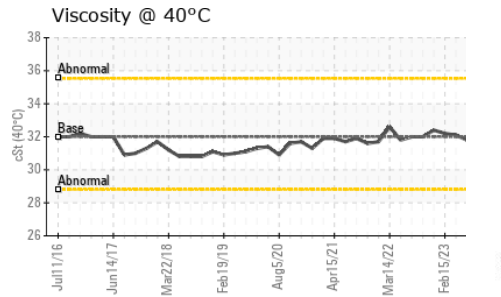
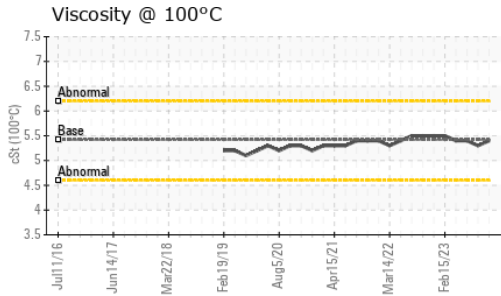
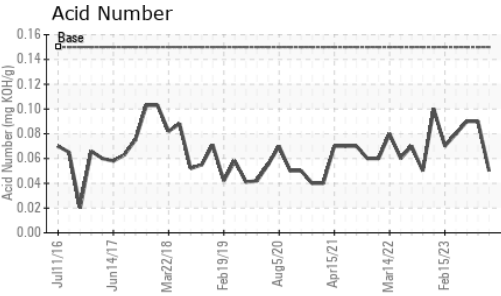
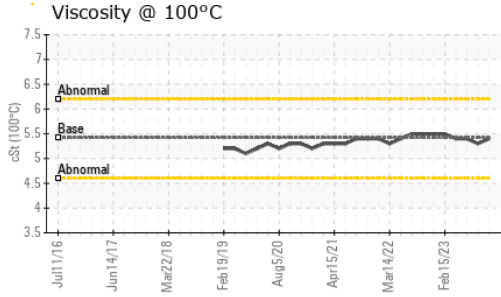
CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>15	<1	0
Sodium	ppm	ASTM D5185(m)		<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	0

FLUID DEGRADATION method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D974*	0.15	0.05	0.09
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OIL ANALYSIS REPORT

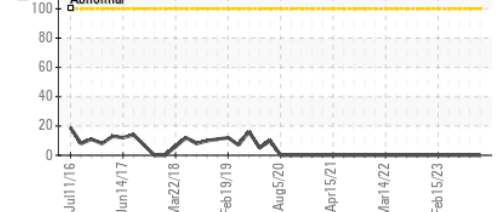
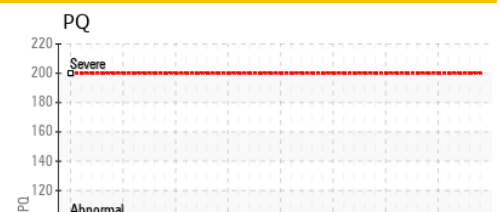
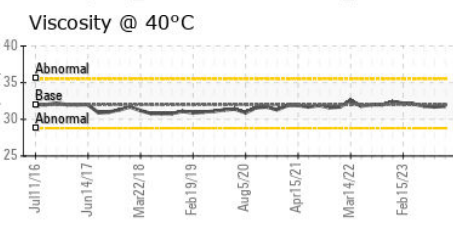
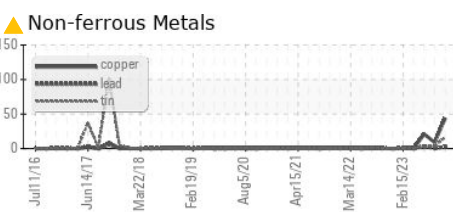
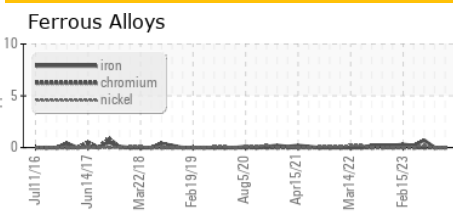


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	VLITE
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32.0	31.8	31.8
Visc @ 100°C	cSt	ASTM D7279(m)	5.42	5.3	5.4
Viscosity Index (VI)	Scale	ASTM D2270*	103	97	103

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076937 **Received** : 31 Jan 2024
Lab Number : 02612458 **Diagnosed** : 01 Feb 2024
Unique Number : 5721553 **Diagnostician** : Bill Quesnel
Test Package : IND 2 (Additional Tests: KV100, TAN Man, VI)

Dryden Fibre
 Box 3001, 1 Duke Street
 Dryden, ON
 CA P8N 2Z7
 Contact: Adebukola Adekanye
 aadekanye@drydenfibre.ca
 T: (807)223-9950
 F: (807)223-9176

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.