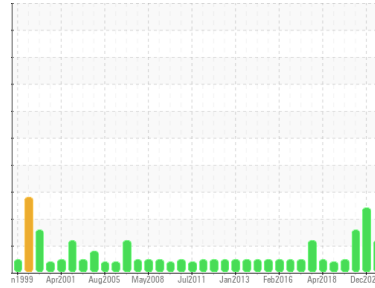




OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id
BDE - UNIT 6 TURBINE BEARING (S/N 59914)

Component
Bearing

Fluid
PETRO CANADA TURBOFLO R&O 46 (--- LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0682560	WC	WC0524849
Sample Date	Client Info		05 Jun 2023	27 Dec 2022	14 Mar 2022
Machine Age	hrs	Client Info	88509	0	0
Oil Age	hrs	Client Info	88509	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m) >20	<1	5	<1
Chromium	ppm	ASTM D5185(m) >20	0	0	0
Nickel	ppm	ASTM D5185(m) >20	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	0	0	0
Lead	ppm	ASTM D5185(m) >20	4	<1	4
Copper	ppm	ASTM D5185(m) >20	<1	<1	<1
Tin	ppm	ASTM D5185(m) >20	<1	1	<1
Antimony	ppm	ASTM D5185(m)	0	<1	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

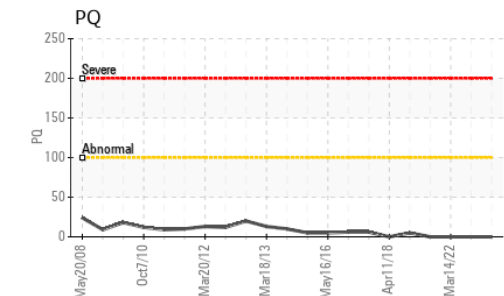
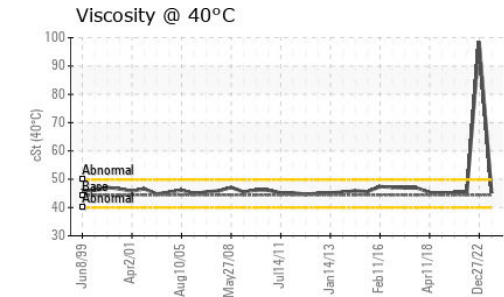
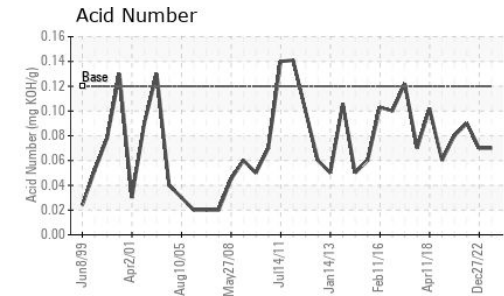
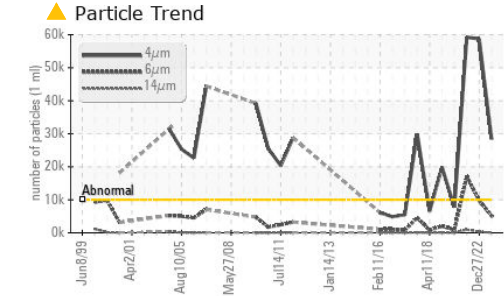
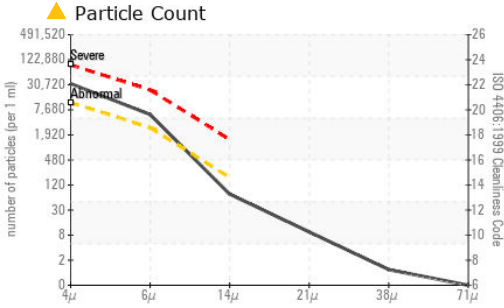
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<1	<1
Barium	ppm	ASTM D5185(m)	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m)	<1	0	0
Calcium	ppm	ASTM D5185(m) 0	0	0	<1
Phosphorus	ppm	ASTM D5185(m) 3	2	0	3
Zinc	ppm	ASTM D5185(m) 0	2	2	2
Sulfur	ppm	ASTM D5185(m)	64	542	54
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	8	0	6
Sodium	ppm	ASTM D5185(m)	<1	0	<1
Potassium	ppm	ASTM D5185(m) >20	<1	<1	<1



OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0682560 **Received** : 15 Jun 2023
Lab Number : **02564383** **Tested** : 16 Jun 2023
Unique Number : 5593424 **Diagnosed** : 16 Jun 2023 - Kevin Marson
Test Package : IND 2 (Additional Tests: PrtCount, TAN Man)

NEWFOUNDLAND & LABRADOR HYDRO
 BAY D'ESPOIR WHSE., 1 CAMP BOGGY RD., PO BOX 100
 MILLTOWN, BAY D'ESPOIR, NL
 CA A0H 1W0
 Contact: Matthew Lambert
 matthewlambert@nlh.nl.ca
 T: (709)882-3126
 F: (709)882-3161

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.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 28378	▲ 58699	▲ 59262
Particles >6µm	ASTM D7647	>2500	▲ 5169	▲ 9732	▲ 17163
Particles >14µm	ASTM D7647	>160	64	● 278	▲ 977
Particles >21µm	ASTM D7647	>40	8	● 73	▲ 190
Particles >38µm	ASTM D7647	>10	1	4	8
Particles >71µm	ASTM D7647	>3	0	1	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 22/20/13	▲ 23/20/15	▲ 23/21/17

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.12	0.07	0.07	0.09

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	44.4	45.2	▲ 98.5	45.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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