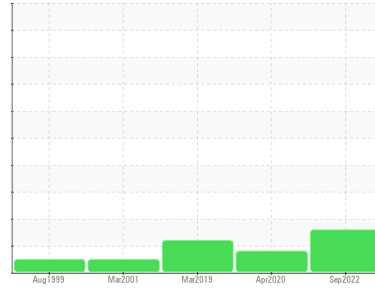




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
[1618854]
 Machine Id
59583 BDE UNIT 5

Component
Bearing
 Fluid
PETRO CANADA TURBOFLO XL46 (--- 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

Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are notably high. Particles >14µm are notably high.

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		WC0642180	WC980109	WC118662
Sample Date	Client Info		10 Sep 2022	06 Apr 2020	26 Mar 2019
Machine Age	hrs	Client Info	91628	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ATTENTION	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	9	0
Iron	ppm	ASTM D5185(m) >20	<1	2	1
Chromium	ppm	ASTM D5185(m) >20	0	<1	0
Nickel	ppm	ASTM D5185(m) >20	0	<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	7	14	11
Copper	ppm	ASTM D5185(m) >20	0	<1	0
Tin	ppm	ASTM D5185(m) >20	<1	0	0
Antimony	ppm	ASTM D5185(m)	1	<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	<1

ADDITIVES

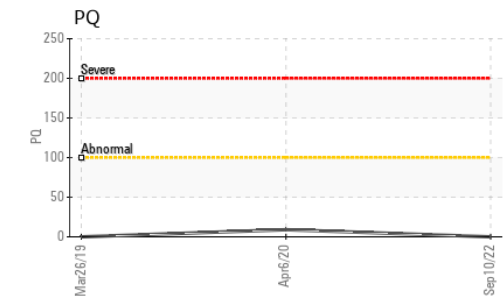
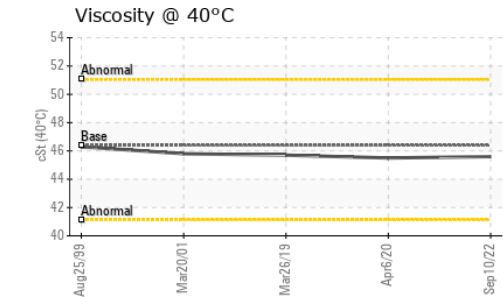
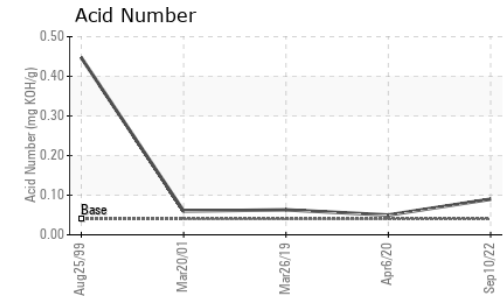
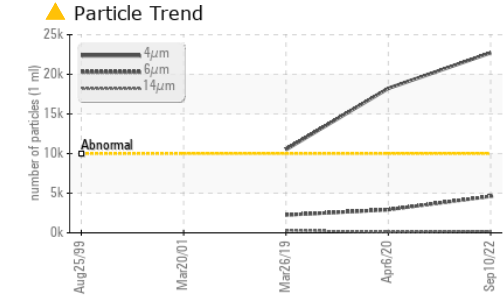
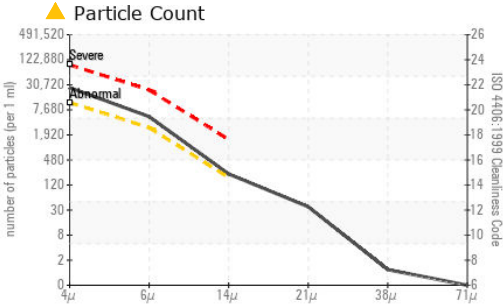
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<1	<1	0
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	<1
Magnesium	ppm	ASTM D5185(m)	0	0	0
Calcium	ppm	ASTM D5185(m)	0	<1	<1
Phosphorus	ppm	ASTM D5185(m)	0	3	3
Zinc	ppm	ASTM D5185(m) 0	<1	2	1
Sulfur	ppm	ASTM D5185(m)	634	140	135
Lithium	ppm	ASTM D5185(m)	<1	<1	0

CONTAMINANTS

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



OIL ANALYSIS REPORT



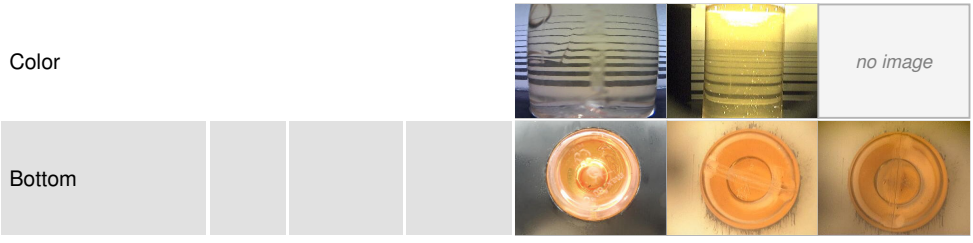
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 22720	● 18231	● 10501
Particles >6µm	ASTM D7647	>2500	● 4608	● 2919	● 2252
Particles >14µm	ASTM D7647	>160	● 195	● 109	● 298
Particles >21µm	ASTM D7647	>40	▲ 32	● 25	▲ 88
Particles >38µm	ASTM D7647	>10	▲ 1	● 2	● 2
Particles >71µm	ASTM D7647	>3	▲ 0	● 0	● 0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 22/19/15	● 21/19/14	● 21/18/15

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	0.09	0.05	0.063

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
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)	46.39	45.6	45.5	45.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0642180
Lab Number : 02536309
Unique Number : 5525309
Test Package : IND 2 (Additional Tests: PRTCOUNT, TAN Sep)

NEWFOUNDLAND & LABRADOR HYDRO
 BAY D'ESPOIR WHSE., 1 CAMP BOGGY RD., PO BOX 100
 MILLTOWN, BAY D'ESPOIR, NL
 CA A0H 1W0

Received : 30 Jan 2023
 Tested : 03 Feb 2023
 Diagnosed : 03 Feb 2023 - Kevin Marson
 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.

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