

# **OIL ANALYSIS REPOF**

SAMPLE INFORMA

CONTAMINATIO

WEAR METALS

ppm

ppm

ppm

ppm

ppm

ppm

ppm

ppm

ASTM D5185(m)

ASTM D5185(m)

ASTM D5185(m)

ASTM D5185(m)

ASTM D5185(m)

ASTM D5185(m)

ASTM D5185(m) >20

ASTM D5185(m) >5

>5

Sample Number

Sample Date

Machine Age

Oil Changed

Sample Status

Oil Age

Water

Iron

Nickel

Silver

Lead

Tin

Copper

Antimony

Vanadium

Beryllium

Sodium

Potassium

Titanium

Aluminum

Chromium

## Area Main Power Generation [450331550] Generator MPG (Stbd) - Lubrication System (S/N Sample Tag XX-80101 Turbine

Fluid PETRO CANADA TURBOFLO 32 (8300 LTR)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

#### Wear

Component wear rates appear to be normal (unconfirmed).

#### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

#### Fluid Condition

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

<b>RT</b> 101-S1)	Samp	le Rating Tre	nd		ORMAL
MATION	22019 Feb20	20 Sep2020 Jan2023	May2023 Jul2023 Nov2023 F	history1	history2
	Client Info		PC0080759	PC	PC
	Client Info		09 May 2024	30 Apr 2024	23 Apr 2024
hrs	Client Info		0	0	0
hrs	Client Info		0	0	0
	Client Info		N/A	N/A	N/A
			NORMAL	NORMAL	NORMAL
ION	method	limit/base	current	history1	history2
	WC Method	>0.03	NEG	NEG	NEG
S	method	limit/base	current	history1	history2
ppm	ASTM D5185(m)	>15	<1	<1	<1
ppm	ASTM D5185(m)	>4	0	0	0
ppm	ASTM D5185(m)	>2	0	0	0
ppm	ASTM D5185(m)		0	0	0
ppm	ASTM D5185(m)		0	0	0
ppm	ASTM D5185(m)	>10	0	<1	<1

0

<1

<1

0

0

0

0

<1

<1

0

0

0

<1

0

<1

<1

0

0

0

- / -	le le			-		
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	0	<1	0
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1	0	0
Calcium	ppm	ASTM D5185(m)	0	0	0	0
Phosphorus	ppm	ASTM D5185(m)	120	259	259	257
Zinc	ppm	ASTM D5185(m)	0.0	1	<1	1
Sulfur	ppm	ASTM D5185(m)	0	605	729	609
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	0	0	0

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	567	563	622
Particles >6µm	ASTM D7647	>640	190	153	244
Particles >14µm	ASTM D7647	>80	21	9	24
Particles >21µm	ASTM D7647	>20	4	2	5
Particles >38µm	ASTM D7647	>4	0	0	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	16/15/12	16/14/10	16/15/12

<1 0

0



491,520 122 88

7 68

48

120 30

8

0.1

Acid Number (mg KOH/g) 600

75

cSt (100°C)

4

Ab 6.5

> Bas Abnorma

Sep7/19

eb25/20

Sen6/20 lan25/23

number of particles (per 1 1.92 Particle Count

Acid Number

ah75/7 Sep7/

Viscosity @ 100°C

144

# **OIL ANALYSIS REPORT**

FLUID DEGRA	DATION	method	limit/base	current	history1
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	0.03	0.03
VISUAL		method	limit/base	current	history1
White Metal	scalar	Visual*	NONE	NONE	NONE
ellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.03	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG
FLUID PROP	ERTIES	method	limit/base	current	history1
Visc @ 40°C	cSt	ASTM D7279(m)	34.0	33.9	34.2
Visc @ 100°C	cSt	ASTM D7279(m)	5.59	5.7	5.7
Viscosity Index (VI)	Scale	ASTM D2270*	110	107	105
SAMPLE IMA	GES	method	limit/base	current	history1
				Same of	
Color					



0.03

NONE

NONE

NONE

NONE

NONE

NONE

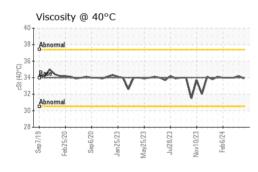
NEG NEG

34.0 5.7

107

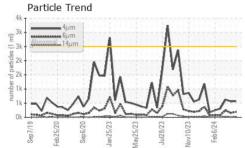
NORML

NORML



May25/23

Vov10/23 Feb6/24





Laboratory CALA Sample No. : PC0080759 Lab Number : 02637948 ISO 17025:2017 Accredited Laboratory Unique Number : 5787110 Test Package : MAR 2 (Additional Tests: KV100, TAN Man, VI)

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 28 May 2024 Tested : 29 May 2024 Diagnosed : 29 May 2024 - 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.

Bottom

Suncor - Terra Nova Projects

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