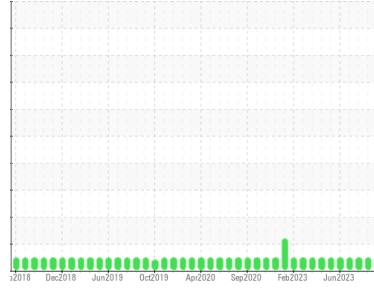


Area
Main Power Generation [450183026]
Machine Id
Generator MPG (Stbd) - Lubrication System (S/N Sample Tag XX-80101-S1)
Component
Turbine
Fluid
PETRO CANADA TURBOFLO 32 (8300 LTR)



DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC	PC	PC0040112
Sample Date	Client Info	28 Jul 2023	19 Jul 2023	04 Jul 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		NORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >15	1	1
Chromium	ppm	ASTM D5185(m) >4	0	0
Nickel	ppm	ASTM D5185(m) >2	<1	0
Titanium	ppm	ASTM D5185(m)	0	0
Silver	ppm	ASTM D5185(m)	0	0
Aluminum	ppm	ASTM D5185(m) >10	<1	0
Lead	ppm	ASTM D5185(m)	0	0
Copper	ppm	ASTM D5185(m) >5	<1	1
Tin	ppm	ASTM D5185(m) >5	2	1
Antimony	ppm	ASTM D5185(m)	0	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	<1
Barium	ppm	ASTM D5185(m) 0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	0	0
Manganese	ppm	ASTM D5185(m)	0	0
Magnesium	ppm	ASTM D5185(m) 0	<1	0
Calcium	ppm	ASTM D5185(m) 0	<1	<1
Phosphorus	ppm	ASTM D5185(m) 120	277	290
Zinc	ppm	ASTM D5185(m) 0.0	2	1
Sulfur	ppm	ASTM D5185(m) 0	617	572
Lithium	ppm	ASTM D5185(m)	<1	<1

CONTAMINANTS

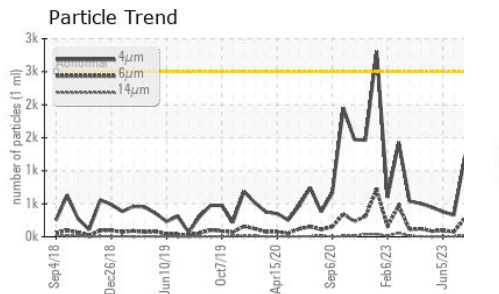
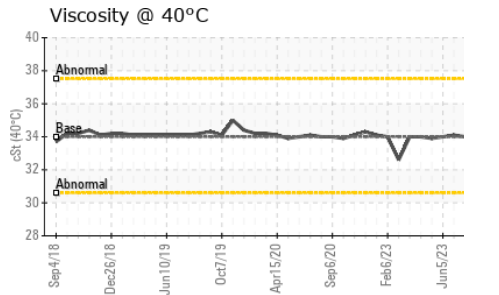
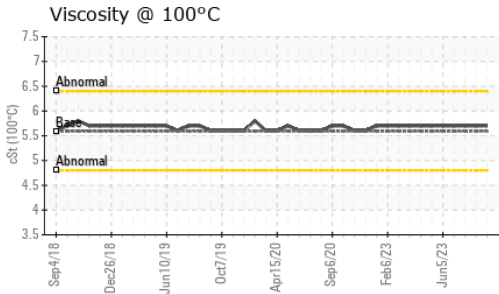
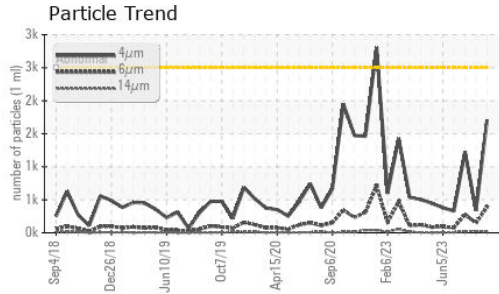
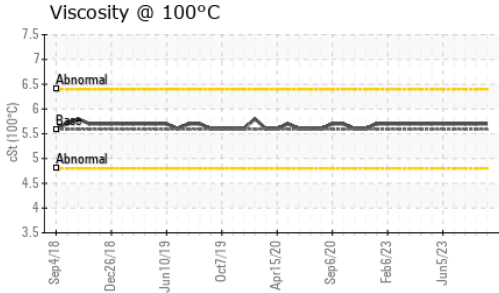
method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<1	2
Sodium	ppm	ASTM D5185(m)	<1	0
Potassium	ppm	ASTM D5185(m) >20	<1	<1

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >2500	1707	339	329
Particles >6µm	ASTM D7647 >640	394	149	78
Particles >14µm	ASTM D7647 >80	15	25	8
Particles >21µm	ASTM D7647 >20	4	7	3
Particles >38µm	ASTM D7647 >4	0	0	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >18/16/13	18/16/11	16/14/12	16/13/10

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974* 0.04	0.04	0.08	0.04



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	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 PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	34.0	34.2	33.7	34.0
Visc @ 100°C	cSt	ASTM D7279(m)	5.59	5.7	5.7	5.7
Viscosity Index (VI)	Scale	ASTM D2270*	110	105	108	107

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

Ferrous Alloys

Non-ferrous Metals

Viscosity @ 40°C

Particle Count

Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02576170
Unique Number : 5629230
Test Package : MAR 2 (Additional Tests: KV100, TAN Man, VI)
Received : 16 Aug 2023
Diagnosed : 17 Aug 2023
Diagnostician : Kevin Marson

Suncor - Terra Nova Projects
 Scotia Centre, 235 Water Street
 St. John's, NL
 CA A1C 1B6
 Contact: Josh Hynes
 joshhynes@suncor.com
 T: (709)778-3575
 F: (709)724-2835

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.