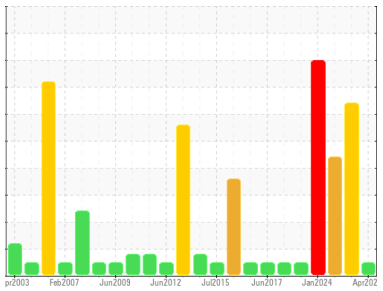
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
Main Power Generation [450305073]
Machine Id
Generator - MPG (Port) - Atomizing Compressor Crank Case (S/N Sample Tag XX-80201-S3)
Component
Compressor
Fluid
PETRO CANADA ENDURATEX EP 220 (2 LTR)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
The water content is negligible. There is no indication of any contamination in the oil.

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	PC0076665
Sample Date		Client Info		**30 Apr 2024**	03 Apr 2024	06 Feb 2024
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**0**	0	0
Iron	ppm	ASTM D5185(m)	>50	**6**	6	6
Chromium	ppm	ASTM D5185(m)	>5	**0**	0	0
Nickel	ppm	ASTM D5185(m)		**<1**	0	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>15	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>65	**0**	0	0
Copper	ppm	ASTM D5185(m)	>65	**2**	2	2
Tin	ppm	ASTM D5185(m)	>10	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

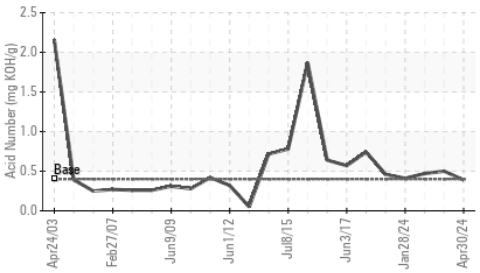
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	60	**72**	76	77
Barium	ppm	ASTM D5185(m)	0	**<1**	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)	0	**0**	0	0
Magnesium	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)	0	**1**	1	2
Phosphorus	ppm	ASTM D5185(m)	270	**282**	288	290
Zinc	ppm	ASTM D5185(m)	0	**2**	2	2
Sulfur	ppm	ASTM D5185(m)	11200	**5321**	5456	5978
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>35	**3**	3	4
Sodium	ppm	ASTM D5185(m)		**<1**	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Water	%	ASTM D6304*	>0.1	**0.010**	0.006	0.004
ppm Water	ppm	ASTM D6304*	>1000	**103**	69	48

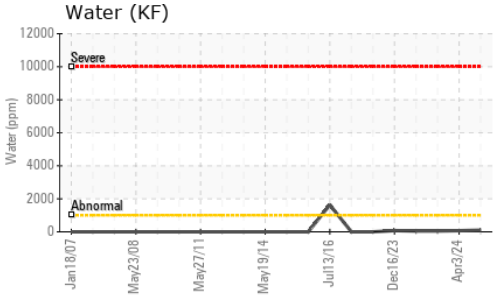
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	**190043**	▲ 200932	▲ 165448
Particles >6µm	ASTM D7647	>2500	**50350**	▲ 54655	▲ 50087
Particles >14µm	ASTM D7647	>320	**2314**	▲ 2591	▲ 2411
Particles >21µm	ASTM D7647	>80	**511**	▲ 555	▲ 510
Particles >38µm	ASTM D7647	>20	**27**	● 32	27
Particles >71µm	ASTM D7647	>4	**1**	3	3
Oil Cleanliness	ISO 4406 (c)	>20/18/15	**25/23/18**	▲ 25/23/19	▲ 25/23/18

OIL ANALYSIS REPORT

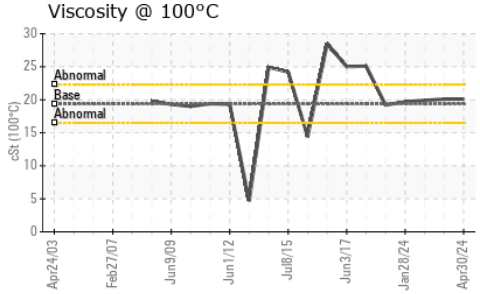
Acid Number



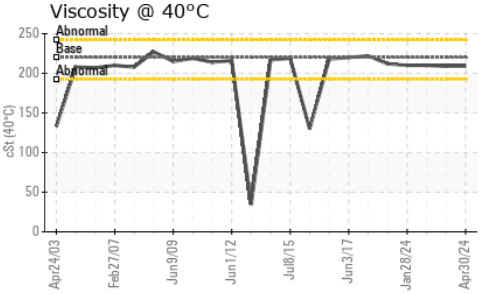
Water (KF)



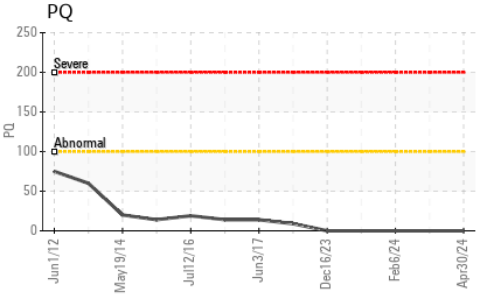
Viscosity @ 100°C



Viscosity @ 40°C



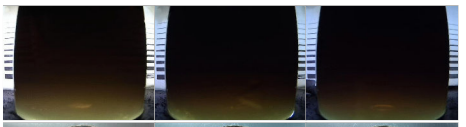
PQ



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.40	**0.39**	0.50	0.47

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	**VLITE**	NONE	NONE
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*	>0.1	**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)	220	**209**	209	210
Visc @ 100°C	cSt	ASTM D7279(m)	19.35	**20.1**	20.1	19.9
Viscosity Index (VI)	Scale	ASTM D2270*	99	**111**	111	109

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02636091
Unique Number : 5785253
Test Package : MAR 2 (Additional Tests: KF, KV100, PQ, PrtCount, VI)
Received : 16 May 2024
Tested : 21 May 2024
Diagnosed : 21 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.

Suncor - Terra Nova Projects
Scotia Centre, 235 Water Strret
St. John`s, NL
CA A1C 1B6
Contact: Josh Hynes
joshynes@suncor.com
T: (709)778-3575
F: (709)724-2835