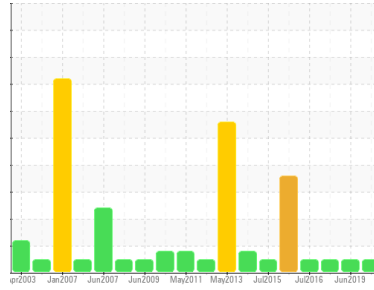


Area
Main Power Generation [450240124]
 Machine Id
Generator - MPG (Port) - Atomizing Compressor Crank Case (S/N Sample Tag XX-80201-S3)
 Component
Compressor
 Fluid
PETRO CANADA ENDURATEX EP 220 (2 LTR)



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	PC0076400	PC	PC
Sample Date	Client Info	16 Dec 2023	11 Jun 2019	03 Jun 2017
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

PQ	ASTM D8184*		0	9	14	
Iron	ppm	ASTM D5185(m)	>50	4	8	7
Chromium	ppm	ASTM D5185(m)	>5	0	0	<1
Nickel	ppm	ASTM D5185(m)		0	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	<1	<1
Copper	ppm	ASTM D5185(m)	>65	2	2	3
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	81	22	25
Barium	ppm	ASTM D5185(m)	0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	<1	<1
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<1	<1	0
Calcium	ppm	ASTM D5185(m)	0	2	2	1
Phosphorus	ppm	ASTM D5185(m)	270	265	396	397
Zinc	ppm	ASTM D5185(m)	0	2	4	5
Sulfur	ppm	ASTM D5185(m)	11200	5968	5791	5704
Lithium	ppm	ASTM D5185(m)		<1	0	<1

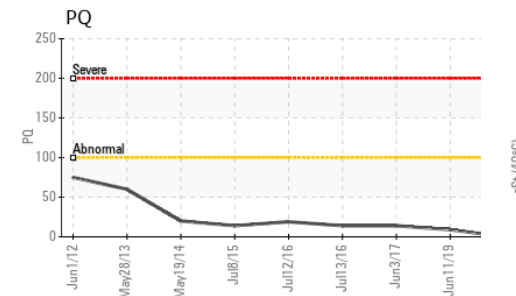
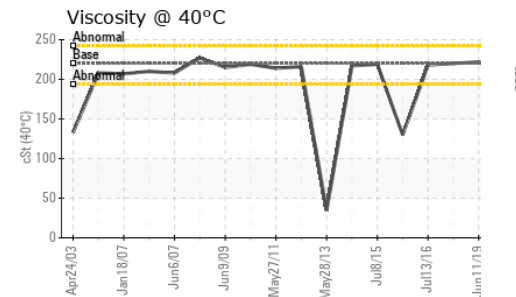
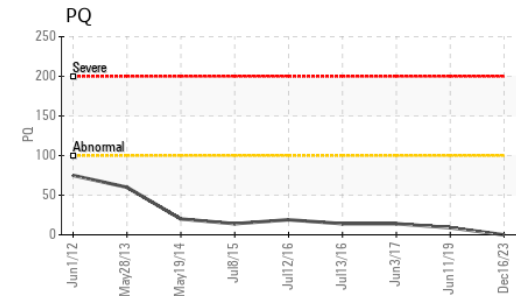
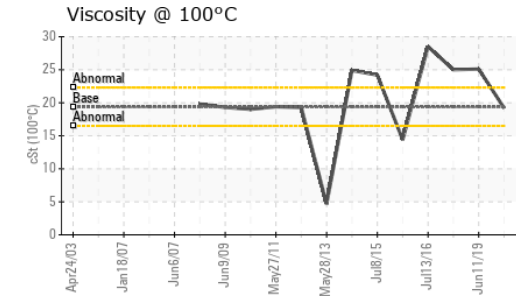
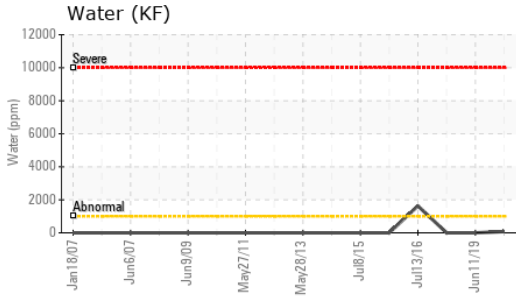
CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>35	4	1	<1
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1
Water	%	ASTM D6304*	>0.1	0.007	---	---
ppm Water	ppm	ASTM D6304*	>1000	75	---	---

FLUID CLEANLINESS method limit/base current history1 history2

Particles >4µm	ASTM D7647	>10000	121442	174452	---
Particles >6µm	ASTM D7647	>2500	50096	58196	---
Particles >14µm	ASTM D7647	>320	3133	4910	---
Particles >21µm	ASTM D7647	>80	782	1395	---
Particles >38µm	ASTM D7647	>20	29	22	---
Particles >71µm	ASTM D7647	>4	14	0	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	24/23/19	25/23/19	---

OIL ANALYSIS REPORT



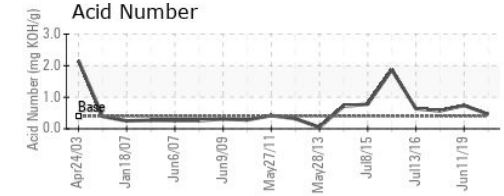
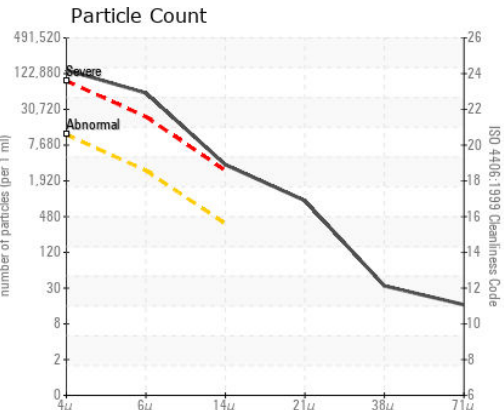
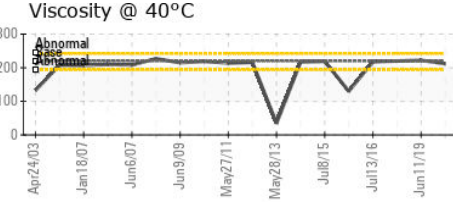
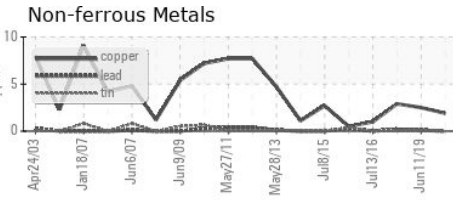
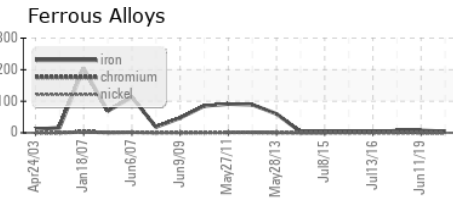
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.40	0.46	0.741	0.57

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE	VLITE
Yellow Metal	scalar	Visual*	NONE	VLITE	VLITE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	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*	>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	212	222	220
Visc @ 100°C	cSt	ASTM D7279(m)	19.35	19.2	25.1	25
Viscosity Index (VI)	Scale	ASTM D2270*	99	102	142	143

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom					no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076400
Lab Number : **02609535**
Unique Number : 5710621
Test Package : MAR 2 (Additional Tests: KF, KV100, PQ, PrtCount, TAN Man, VI)

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.