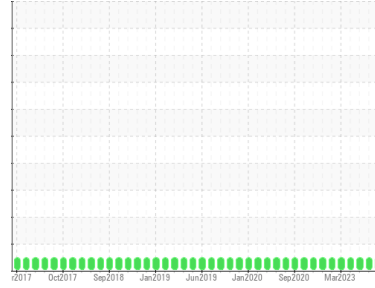


Area
Fwd Machinery Space [450240127]
Machine Id
Generator - SKSG Engine Crank Case (S/N Sample Tag CD-86201-S1)
Component
Diesel Engine
Fluid
PETRO CANADA BP ENERGOL DS3 154 (2670 LTR)



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
There is no indication of any contamination in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0076271	PC	PC
Sample Date	Client Info	11 Dec 2023	26 Sep 2023	08 Sep 2023
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	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >4.0	<1.0	<1.0	<1.0
Water	WC Method >0.1	NEG	NEG	NEG
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >25	6	6	6
Chromium	ppm ASTM D5185(m) >5	0	0	0
Nickel	ppm ASTM D5185(m) >5	0	<1	<1
Titanium	ppm ASTM D5185(m) >2	0	0	0
Silver	ppm ASTM D5185(m) >2	0	<1	<1
Aluminum	ppm ASTM D5185(m) >10	2	1	2
Lead	ppm ASTM D5185(m) >5	0	<1	0
Copper	ppm ASTM D5185(m) >5	<1	<1	<1
Tin	ppm ASTM D5185(m) >5	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) 0	1	2	2
Barium	ppm ASTM D5185(m) 0	0	<1	0
Molybdenum	ppm ASTM D5185(m) 0	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	0
Magnesium	ppm ASTM D5185(m) 15	19	17	17
Calcium	ppm ASTM D5185(m) 5500	5260	5442	5499
Phosphorus	ppm ASTM D5185(m) 580	895	867	874
Zinc	ppm ASTM D5185(m) 650	957	971	984
Sulfur	ppm ASTM D5185(m) 8500	10456	9941	10110
Lithium	ppm ASTM D5185(m)	<1	<1	<1

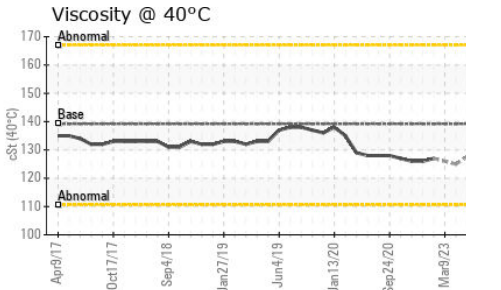
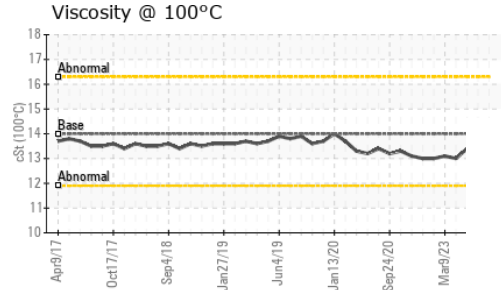
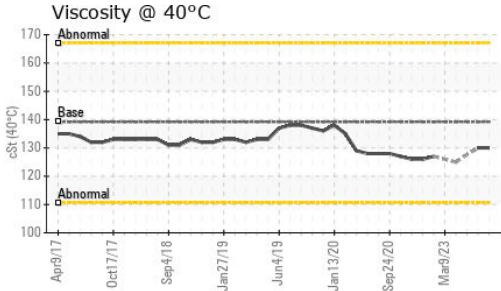
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	5	4	6
Sodium	ppm ASTM D5185(m)	1	1	1
Potassium	ppm ASTM D5185(m) >20	<1	<1	0

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >2	0.1	0	0.6
Nitration	Abs/cm ASTM D7624* >20	10.5	10.0	9.5
Sulfation	Abs./1mm ASTM D7415* >30	15.5	14.9	13.2

OIL ANALYSIS REPORT

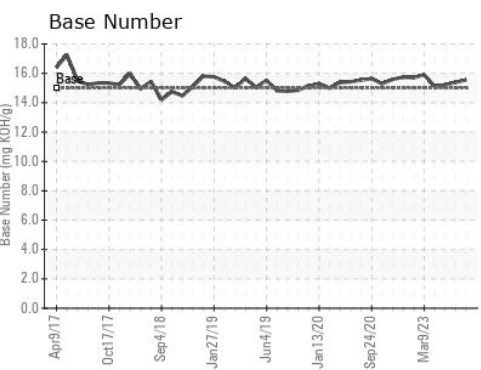
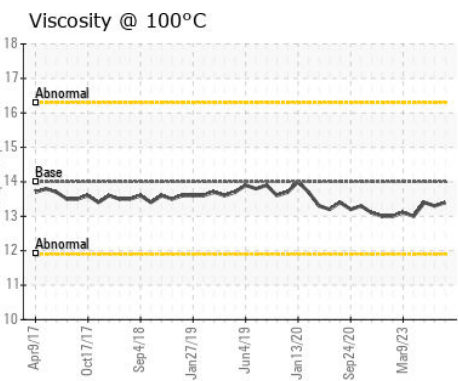
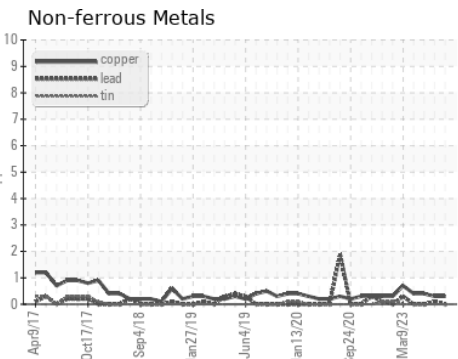
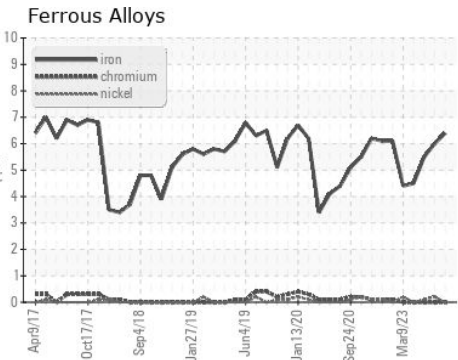


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	8.8	8.2	7.5
Base Number (BN)	mg KOH/g	ASTM D2896*	15	15.56	15.38	15.22

VISUAL		method	limit/base	current	history1	history2
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)	139.2	130	130	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.0	13.4	13.3	13.4
Viscosity Index (VI)	Scale	ASTM D2270*	99	97	96	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076271 **Received** : 17 Jan 2024
Lab Number : **02609161** **Diagnosed** : 18 Jan 2024
Unique Number : 5710247 **Diagnostician** : Kevin Marson
Test Package : MAR 2 (Additional Tests: KV40, VI)

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 St. John's, NL
 CA A1C 1B6
 Contact: Josh Hynes
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 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.