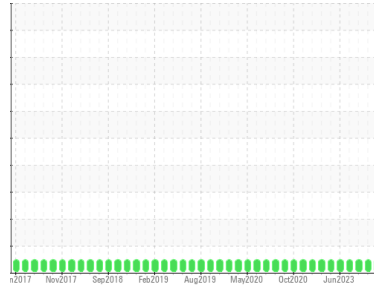


Area
Fwd Machinery Space [RWA-932]
Machine Id
Generator - SKSG Engine Crank Case (S/N Sample Tag CD-86201-S1)
Component
Diesel Engine
Fluid
PETRO CANADA BP ENERGOL DS3 154 (2670 LTR)



DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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	PC0076307	PC0076271	PC
Sample Date	Client Info	22 Jan 2024	11 Dec 2023	26 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	7	6	6
Chromium	ppm	ASTM D5185(m)	>5	<1	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>10	2	2	1
Lead	ppm	ASTM D5185(m)	>5	<1	0	<1
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	1	2
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	15	19	19	17
Calcium	ppm	ASTM D5185(m)	5500	5356	5260	5442
Phosphorus	ppm	ASTM D5185(m)	580	895	895	867
Zinc	ppm	ASTM D5185(m)	650	969	957	971
Sulfur	ppm	ASTM D5185(m)	8500	10325	10456	9941
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

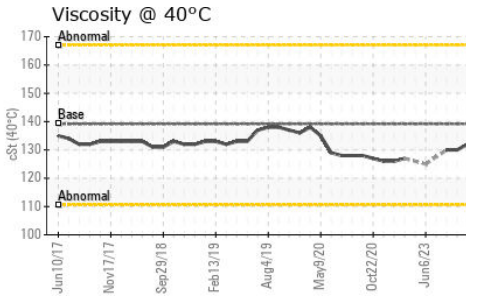
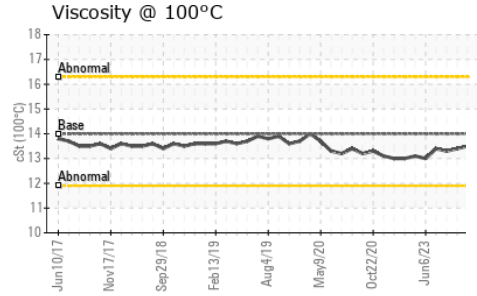
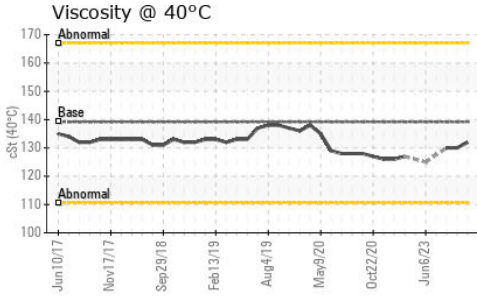
CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>20	5	5	4
Sodium	ppm	ASTM D5185(m)		1	1	1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

INFRA-RED method limit/base current history1 history2

Soot %	%	ASTM D7844*	>2	0.1	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	10.0	10.5	10.0
Sulfation	Abs./1mm	ASTM D7415*	>30	15.3	15.5	14.9

OIL ANALYSIS REPORT

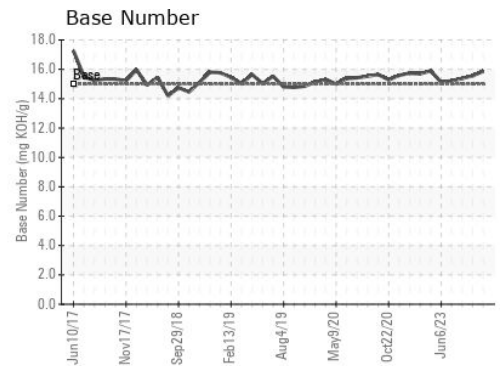
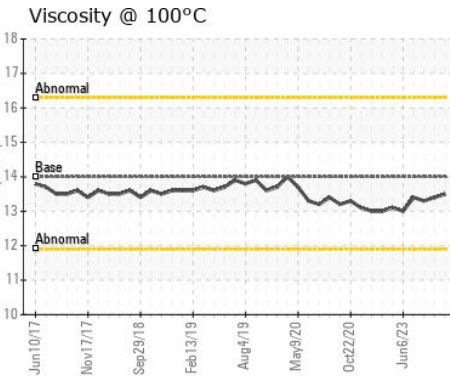
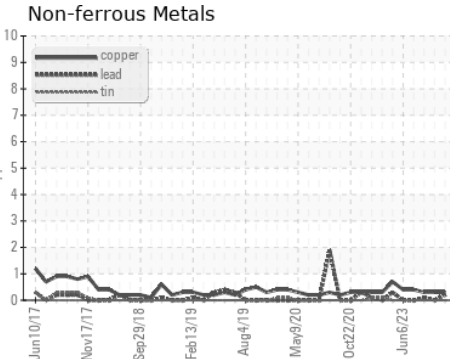
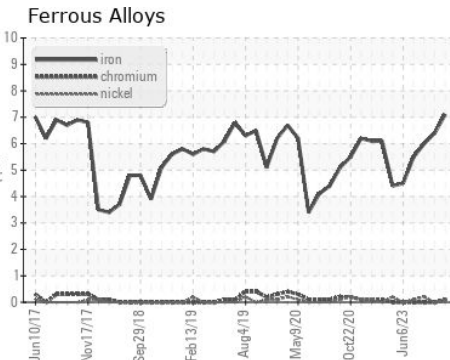


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	8.7	8.8	8.2
Base Number (BN)	mg KOH/g	ASTM D2896*	15	15.87	15.56	15.38

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	132	130	130
Visc @ 100°C	cSt	ASTM D7279(m)	14.0	13.5	13.4	13.3
Viscosity Index (VI)	Scale	ASTM D2270*	99	96	97	96

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076307
Lab Number : **02616188**
Unique Number : 5733298
Test Package : IND 2 (Additional Tests: KV40, VI)
Received : 16 Feb 2024
Tested : 20 Feb 2024
Diagnosed : 20 Feb 2024 - Kevin Marson

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 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.