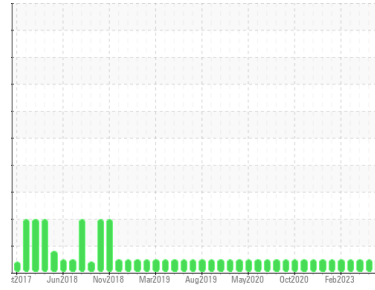


Area
Fwd Machinery Space [450204290]
 Machine Id
Generator - PKSG Engine Crank Case (S/N Sample Tag CD-86101-S1)
 Component
Diesel Engine
 Fluid
PETRO CANADA BP ENERGOL DS3 154 (2670 LTR)



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	PC	PC	PC
Sample Date	Client Info	26 Sep 2023	08 Sep 2023	29 May 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
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS method limit/base current history1 history2

PQ	ASTM D8184*		0	0	0
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	0
Titanium	ppm ASTM D5185(m)	>2	0	0	0
Silver	ppm ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm ASTM D5185(m)	>10	1	2	2
Lead	ppm ASTM D5185(m)	>5	<1	0	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	2	2	2
Barium	ppm ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm ASTM D5185(m)	0	0	0	<1
Manganese	ppm ASTM D5185(m)		0	0	<1
Magnesium	ppm ASTM D5185(m)	15	16	17	19
Calcium	ppm ASTM D5185(m)	5500	5463	5586	5426
Phosphorus	ppm ASTM D5185(m)	580	860	886	940
Zinc	ppm ASTM D5185(m)	650	973	989	987
Sulfur	ppm ASTM D5185(m)	8500	10138	10291	10661
Lithium	ppm ASTM D5185(m)		<1	<1	<1

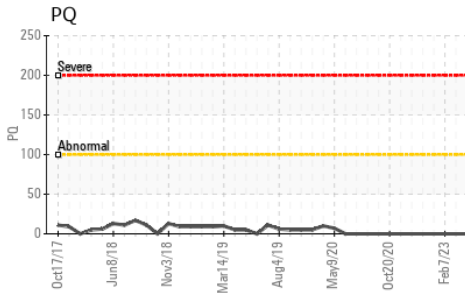
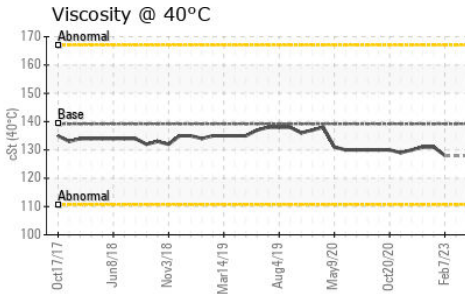
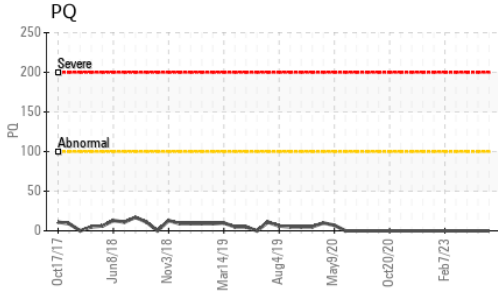
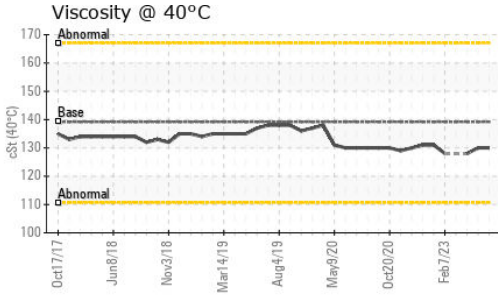
CONTAMINANTS method limit/base current history1 history2

Silicon	ppm ASTM D5185(m)	>20	5	5	6
Sodium	ppm ASTM D5185(m)		<1	<1	<1
Potassium	ppm ASTM D5185(m)	>20	<1	0	<1

INFRA-RED method limit/base current history1 history2

Soot %	% ASTM D7844*	>2	0	0.6	0
Nitration	Abs/cm ASTM D7624*	>20	9.7	9.5	9.5
Sulfation	Abs./1mm ASTM D7415*	>30	14.8	13.4	14.4

OIL ANALYSIS REPORT



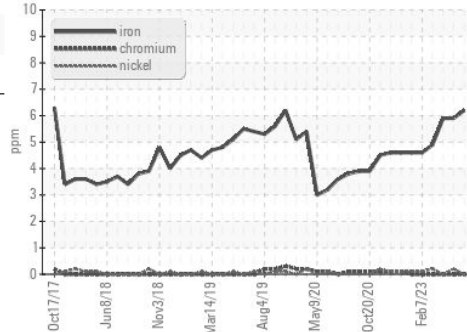
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	8.0	8.0	7.8
Base Number (BN)	mg KOH/g	ASTM D2896*	15	15.41	15.80	15.76

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

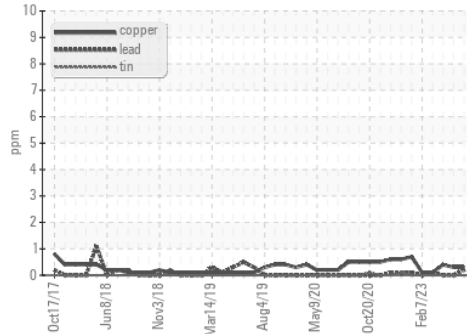
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	139.2	130	130	128
Visc @ 100°C	cSt	ASTM D7279(m)	14.0	13.5	13.4	13.3
Viscosity Index (VI)	Scale	ASTM D2270*	99	98	97	97

GRAPHS

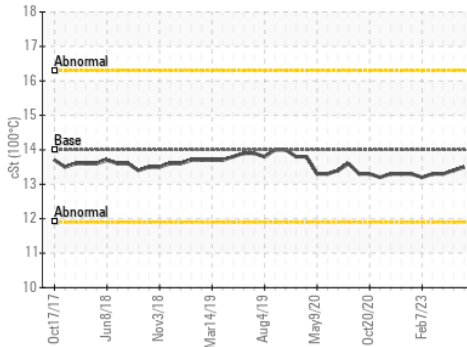
Ferrous Alloys



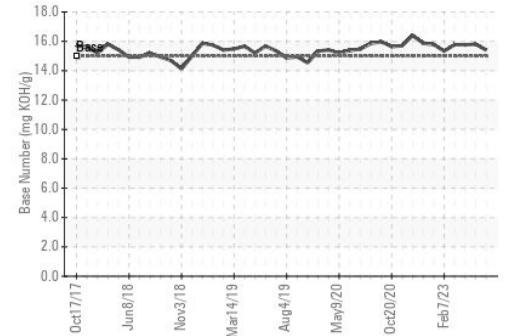
Non-ferrous Metals



Viscosity @ 100°C



Base Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02588524
Unique Number : 5657590
Test Package : MAR 2 (Additional Tests: KV40, PQ, PrtCount, VI)

Received : 12 Oct 2023
Diagnosed : 16 Oct 2023
Diagnostician : 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.

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