

Area

Main Power Generation [450292064]

Machine Id

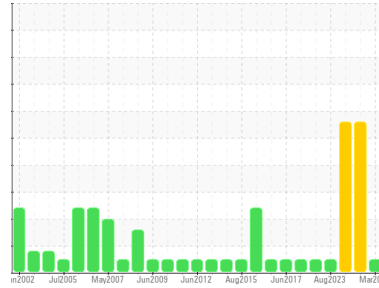
Generator MPG #1 (Stbd) - Starting Engine Crank Case (S/N Sample Tag XX-80101-S2)

Component

Diesel Engine

Fluid

PETRO CANADA DURON MOTOR OIL SAE 40 (37 LTR)



DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. 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	PC0080742	PC0011830	PC0011833
Sample Date	Client Info	15 Mar 2024	08 Sep 2023	08 Sep 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	SEVERE	SEVERE

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	0.6
Water	WC Method >0.2	NEG	NEG	NEG
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) >100	8	1	1
Chromium	ppm ASTM D5185(m) >20	<1	0	0
Nickel	ppm ASTM D5185(m) >4	0	0	0
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m) >3	0	0	0
Aluminum	ppm ASTM D5185(m) >20	1	<1	<1
Lead	ppm ASTM D5185(m) >40	0	0	0
Copper	ppm ASTM D5185(m) >330	1	<1	<1
Tin	ppm ASTM D5185(m) >15	<1	1	1
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) 1.0	2	<1	<1
Barium	ppm ASTM D5185(m) 1.0	0	0	0
Molybdenum	ppm ASTM D5185(m) 1.0	3	0	0
Manganese	ppm ASTM D5185(m) 1	0	0	0
Magnesium	ppm ASTM D5185(m) 15	939	0	0
Calcium	ppm ASTM D5185(m) 2540	1007	0	<1
Phosphorus	ppm ASTM D5185(m) 1000	1060	276	284
Zinc	ppm ASTM D5185(m) 1110	1234	2	2
Sulfur	ppm ASTM D5185(m) 3700	2626	789	644
Lithium	ppm ASTM D5185(m)	<1	<1	<1

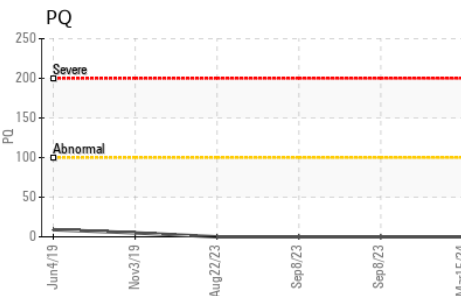
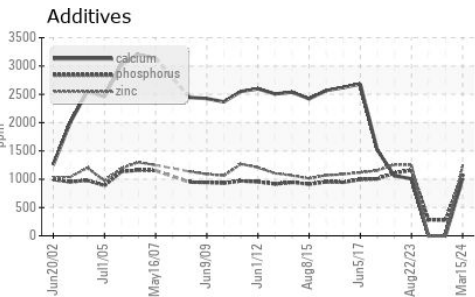
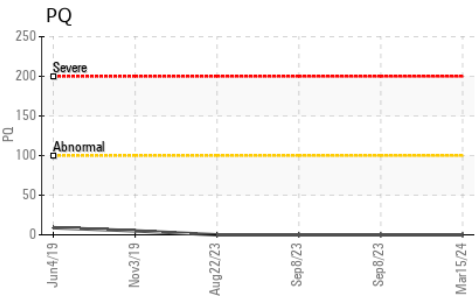
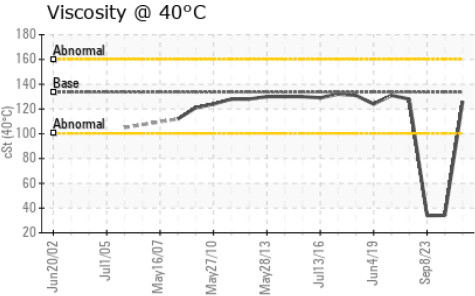
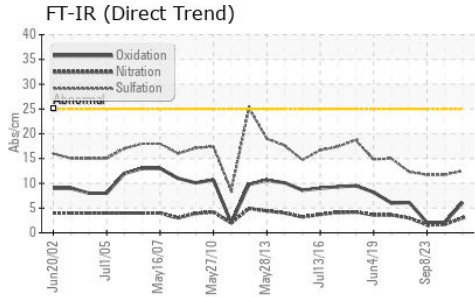
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	7	<1	<1
Sodium	ppm ASTM D5185(m)	<1	0	0
Potassium	ppm ASTM D5185(m) >20	<1	0	0

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0	0	0
Nitration	Abs/cm ASTM D7624* >20	3.0	1.7	1.6
Sulfation	Abs./1mm ASTM D7415* >30	12.5	11.7	11.7

OIL ANALYSIS REPORT

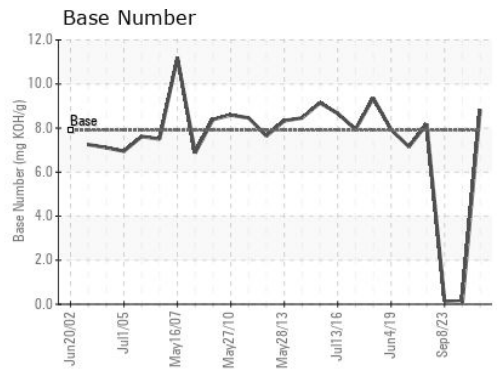
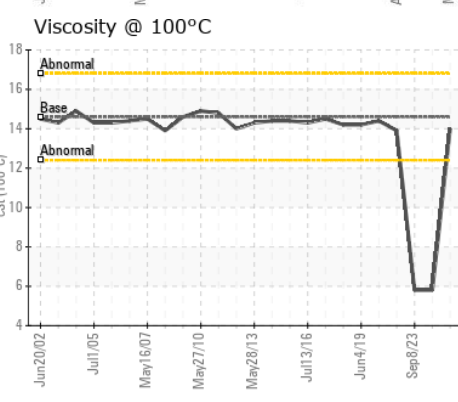
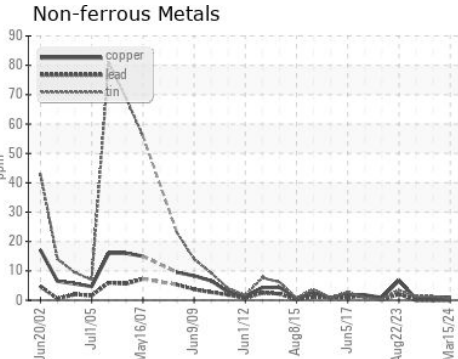
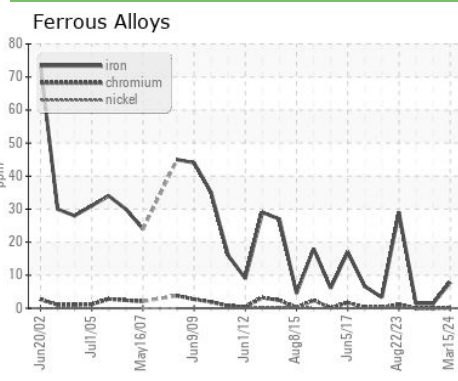


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	6.1	2.1	2.1
Base Number (BN)	mg KOH/g	ASTM D2896*	7.9	8.82	▲ 0.09	▲ 0.14

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	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)	133.5	126	▲ 34.1	▲ 33.9
Visc @ 100°C	cSt	ASTM D7279(m)	14.6	14.0	▲ 5.8	▲ 5.8
Viscosity Index (VI)	Scale	ASTM D2270*	109	109	111	112

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080742 **Received** : 02 Apr 2024
Lab Number : **02625945** **Tested** : 04 Apr 2024
Unique Number : 5759077 **Diagnosed** : 04 Apr 2024 - Kevin Marson
Test Package : MAR 2 (Additional Tests: KV40, PQ, PrtCount, VI)

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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.