

Area

Cranes

Machine Id

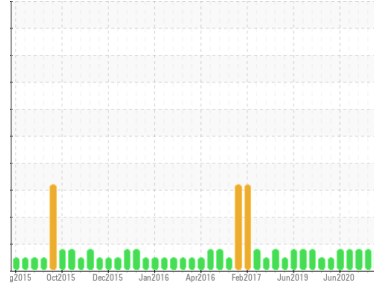
Crane - Fwd Engine Crank Case (S/N Sample Tag MA-04003-S10)

Component

Forward Diesel Engine

Fluid

PETRO CANADA DURON HP 15W40 (42 LTR)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected 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	PC0076454	PC0029590
Sample Date	Client Info			20 Mar 2024	04 Oct 2023	28 Mar 2021
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				MARGINAL	MARGINAL	MARGINAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

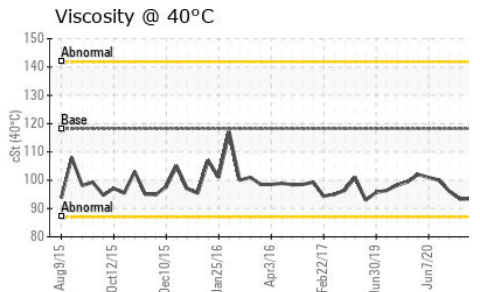
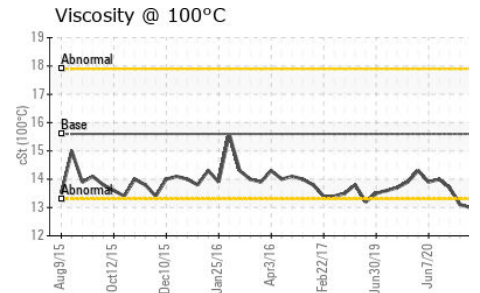
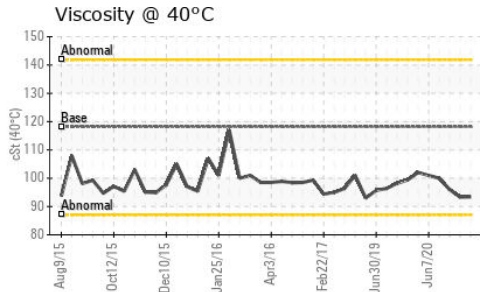
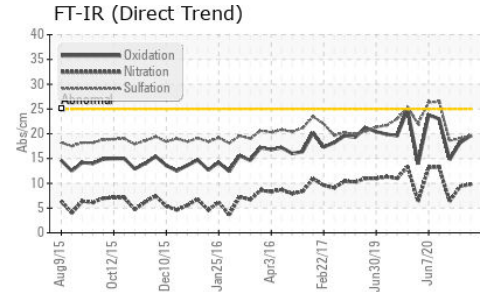
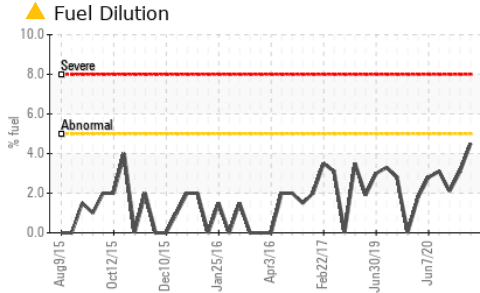
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>100	6	6	2
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	1
Lead	ppm	ASTM D5185(m)	>40	<1	2	<1
Copper	ppm	ASTM D5185(m)	>330	<1	1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	<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)	0	<1	<1	1
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	63	59	57
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	979	929	926
Calcium	ppm	ASTM D5185(m)	1070	1028	1007	977
Phosphorus	ppm	ASTM D5185(m)	1150	997	953	960
Zinc	ppm	ASTM D5185(m)	1270	1193	1157	1185
Sulfur	ppm	ASTM D5185(m)	2060	2475	2393	2634
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	1	2	3
Sodium	ppm	ASTM D5185(m)		2	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Fuel	%	ASTM D7593*	>5	▲ 4.5	▲ 3.1	▲ 2.1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	9.8	9.4	6.3
Sulfation	Abs./1mm	ASTM D7415*	>30	19.5	19.1	18.6

OIL ANALYSIS REPORT

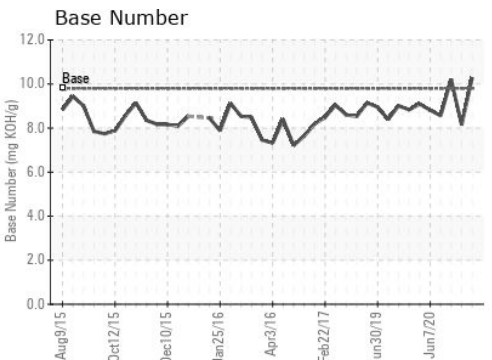
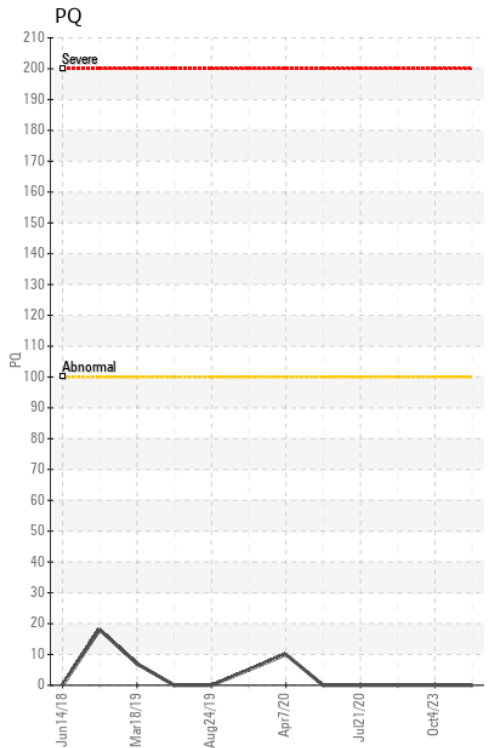
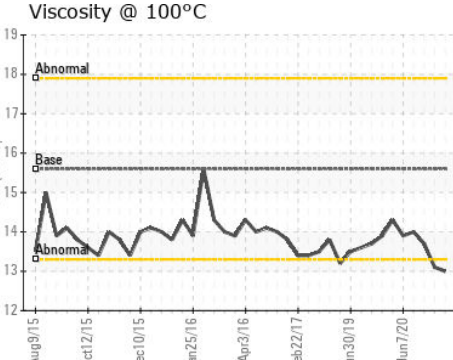
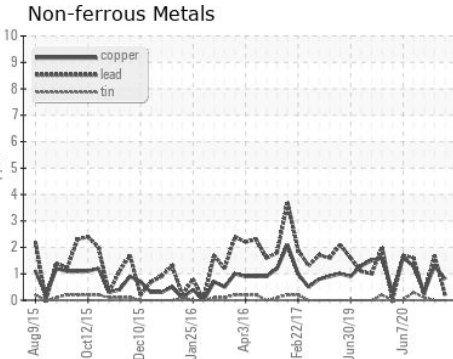
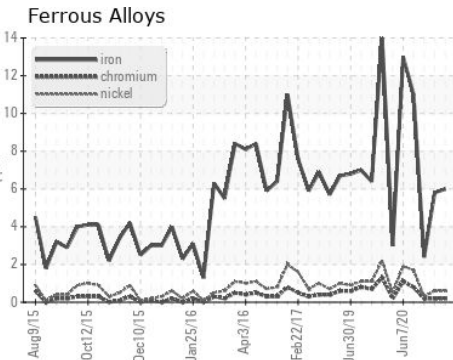


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/1mm	ASTM D7414*	>25	19.6	18.2	14.8
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	10.29	8.14	10.21

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)	118.2	93.4	93.3	96.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.0	13.1	13.7
Viscosity Index (VI)	Scale	ASTM D2270*	139	137	139	144

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : **02626041**
Unique Number : 5759173
Test Package : MAR 2 (Additional Tests: FuelDilution, KV40, PercentFuel, PQ, 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.